

HORTUS JAMAICENSIS,

OR A

BOTANICAL DESCRIPTION,

(ACCORDING TO THE LINNEAN SYSTEM)

AND AN

ACCOUNT OF THE VIRTUES, &c.

OF ITS

INDIGENOUS PLANTS HITHERTO KNOWN,

AS ALSO OF THE MOST USEFUL EXOTICS.

COMPILED FROM THE BEST AUTHORITIES, AND ALPHABETICALLY ARRANGED,

IN TWO VOLUMES,

By JOHN LUNAN.

VOL. II.

JAMAICA:

PRINTED AT THE OFFICE OF THE ST. JAGO DE LA VEGA GAZETTE.

1814.

NOTES ON THE NATURAL HISTORY

OF THE STATE OF TEXAS

BY J. S. HARRIS

VOLUME I

THE MAMMALS

OF THE STATE OF TEXAS

AND THE ADJACENT PARTS OF THE UNITED STATES

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HORTUS JAMAICENSIS.

No English Name.

NAMA.

CL. 5, OR. 2.—*Pentandria digynia.* NAT. OR.—*Succulentæ.*

GEN. CHAR.—Calyx a one-leafed perianth, five-parted, permanent; segments lanceolate, acute, straight, somewhat spreading; corolla one-petaled, wheel-salver-shaped, tube short, border five-parted, segments ovate, obtuse, the length of the calyx; the stamens are five filiform filaments, ovate at the base, inserted into the middle of the tube of the corolla, alternate with and shorter than the segments; anthers oblong, bifid at the base, revolute, incumbent; the pistil has an ovate inferior germ; styles two, capillary, erect, the length of the stamens; stigmas capitate; the pericarp is an ovate-oblong capsule, blunt, compressed, grooved on each side, two-celled, two-valved, shorter than the calyx; seeds numerous, very small, fastened to a flat receptacle in the middle of the partition. There is only one species.

JAMAICENSIS.

JAMAICA.

Reclinata villosa, foliis ovatis, petiolis marginatis recurrentibus, floribus solitariis. Browne, p. 185, t. 18, f. 2.

Root simple, thready; stem herbaceous, from two inches to half a foot in length, sub-divided, procumbent, pubescent, tender, three-winged from the decurrent petioles; branchlets from the axils of the leaves procumbent; leaves opposite, wedge-shaped at the base, ovate-roundish, entire, pubescent; petioles decurrent at the sides, the wings converging to the side opposite to the petiole. Flowers axillary, two to four, in clusters, small, white, on short peduncles; calycine segments linear, erect, somewhat hirsute; tube of the corolla narrower at the base, a little longer than the calyx; segments of the border roundish, erect, convex, incumbent, not spreading; filaments from the base of the corolla, wider at bottom, awl-shaped; anthers roundish; germ oblong, conical; styles contiguous, stigmas blunt; capsule oblong, blunt, four-cornered, acuminate, one-celled, two-valved; containing many minute, roundish, brown, seeds. It is an annual plant in cultivated ground.—Sw. Browne says that the whole of this little plant is somewhat hairy, with the stalk and branches margined; he met with it about the Angels, near Spanish Town.

NASEBERRY-TREE.

ACHRAS.

CL. 6, OR. 1.—*Hexandria monogynia*.NAT. OR.—*Dumosa*.

GEN. CHAR.—See Bully-Tree, p. 124.

SAPOTA.

Annona foliis laurinis glabris, viridi fuscis, fructu minore rotundo viridi flavo, scabro, seminibus fuscis, splendentibus, fissura alba, notatis. Sloane, v. 2, p. 171, t. 230. *Achras* 1 & 2. Browne, p. 200, t. 19, f. 3.

Flowers solitary; leaves lanceolate-ovate.

This tree rises to a considerable height, and is known also by the name of *sapodilla*; the trunk is straight, and covered with a dark brown bark. The branches shoot on all sides towards the top, having twigs very thick beset with leaves, collected towards the ends of the branches in various circular clusters; they are smooth, and of a dull green colour. The flowers come out both from the axils and the ends of the twigs, mixed among the leaves, singly, on peduncles the length of the petioles, inclining downwards, they are white, and almost closed. The fruit is a round berry, covered with a rough brown coat, hard at first, but becoming soft when kept a few days to mellow, about the size of a small apple, having from six to twelve cells, with several seeds in each; surrounded by the pulp, which, in colour, consistence, and taste, somewhat resembles that of the English pear, but sweeter; the seeds are smooth, shining black, with a white streak on one edge, and within a hard shell, containing a white kernel, which is bitter, and may be used in strengthening emulsions. All the tender parts of this tree are full of a milky juice, as well as the fruit, while young. The bark is astringent. Sloane observes that the fruit, when tree-ripe, is so full of milk as to drop out plentifully, when gathered, and, if cut, there appear little rills or veins of milk quite through the pulp, which is so acerb as to draw the mouth together, and cannot be eaten until kept some days till rotten as medlars. It is then an agreeable fruit—Sloane also observes that the seeds are best raised from earth brought from under bastard cedar trees.

See BULLY-TREE and MAMMEE SAPOTA.

NAVELWORTH—See PENNYWORTH.

NEPHRITIC-TREE.

MIMOSA.

CL. 23, OR. 1.—*Polygamia monoecia*.NAT. OR.—*Lomentaceae*.

GEN. CHAR.—See Cacoons, p. 137.

UNGUIS-CATI.

CATCLAW.

Acacia arborea major spinosa, pinnis quatuor, majoribus subrotundis, siliquis varie intortis. Sloane, v. 2, p. 56. *Fruticosa, foliis ovatis binato-binatis; seminibus compressis atro-nitentibus, flocculis rubellis adnatis.* Browne, p. 252.

Thomy.

Thorny; leaves bigemminate, blunt.

This is a small tree, from seven to ten feet in height; the trunk is branched and unarmed; branches sub-divided, commonly unarmed, ash-coloured, wrinkled; stipules none. Petiole bifid, each part terminated by two, sometimes, but rarely, by four leaflets; leaflets wedge-shaped, ovate, blunt, entire, a little oblique, nerved, smooth; glands at the division of the petiole, and between the pinnae; peduncles axillary and lateral, clustered, scattered, terminated by a head of flowers; corolla whitish; filaments monadelphous, three times as long as the corolla, capillary, purplish; anthers minute, simple; germ oblong, compressed, blood-red; style awl-shaped; stigma simple; legume compressed, twisted; seeds five or six, compressed a little, shining, black, fastened by a scarlet membrane.—*Sw.* Sloane observes that the peas are eaten by goats in a scarcity of other food. The bark is very astringent, and used in lotions and fomentations; it is bitterish, and in powder, or decoction, used as a fomentation, cures old ulcers, and restores due tone to the parts when more than usually relaxed in the other sex; but such applications, Browne observes, should be used with great caution, and only at particular times; he calls it the *black-bead shrub*; and it is also called *Barbary thorn*; the wood steeped in water yields a beautiful red tincture, which might be useful in dying. It is easily propagated by seeds or cuttings.

This tree is so called in Jamaica for its being a sovereign remedy for the stone, gravel, and difficulty of making urine; it is also good in obstructions of the liver and spleen. The use of it was discovered to our traders to the main continent of America, where a Spanish bishop did such wonders with it for the gravel and stone, that, being willing it should be known for a public benefit of mankind, he shewed the shrub or tree to some of our merchants, who soon found the same tree in Jamaica, but chiefly about St. Jago de la Vega, for which reason it is believed the Spaniards planted them; for if you go above four or five miles from that town, you will hardly meet with one of these trees throughout the island.* It has a mossy flower, that smells as sweet as the English May or hawthorn; is a large shrub, with little roundish leaves; the whole plant grows almost like an English maple, but is full of small prickles; its leaves glassy, small, and round; its flowers are like the fig-grigo; its fruit is a small long red pod, which when ripe opens of itself, turning inside out, curling, and twisting, shewing a black bean, with a white poppy down substance at one end, in the shape of a kidney. Upon this account, said the Spanish bishop, nature points out the use of this plant; the bean itself is in shape of the kidney, and that white poppy substance about it signifies the fat of the kidney. It is the bark which is chiefly used: When decocted, it smells like new wort, but a little bitterish, of which they must drink plentifully; it worketh by urine. I have often given it with good success; but I am of opinion the fruit would be found to be prevalent if experienced, for the bark is so used, that it is now rare to meet with a tree that hath not been barked.—*Barham, p. 111.*

See CACOONS—CASHAW—GUM-ARABIC—INGA-TREE—SENSITIVE PLANT—WILD TAMARIND.

* This is still the case. In the vicinity of Spanish Town they grow plentifully in most hedges, and become beautiful little trees; very seldom to be found with prickles; perhaps, being exotic, they may have changed their habit in this respect, since the time of Barham. Swartz observes they were commonly unarmed.

NETTLES.

URTICA.

CL. 21, OR. 4.—*Monoecia tetrandria*.NAT. OR.—*Scabridae*.

GEN. CHAR.—See Dwarf Elder, p. 275. Besides the dwarf elder, the following species are natives of Jamaica.

The following species have alternate leaves:

1. BACCIFERA. BERRIED.

Frutescens; foliis amplioribus ovatis, sinuato-dentatis, nervis petiolis et caulibus aculeatis. Browne, p. 337. *Urtica* 9.

Leaves alternate, cordate-toothed, prickly; stem shrubby; female calyxes berried.

This is a small tree from sixteen to eighteen feet high, simple, except at the top, where it is sub-divided, scabrous, prickly; prickles thick, shortish, standing out, occupying the stem longitudinally; branches herbaceous, prickly, stinging very powerfully; leaves large, a span long, petioled, cordate-ovate, serrate, nerved, smooth; the nerves underneath and the petioles prickly; the upper side of the leaves has convex points, terminated by a prickle, scattered over them. Racemes cauline, many-parted, prickly, red; flowers at the ends of the branchlets of the racemes, sessile, diœcious; calyx of the males one-leafed, five-cleft, convex; border spreading, a little reflexed, with lanceolate red segments; nectary the bottom of the calyx, cup-shaped, white.—Filaments five, thicker at the base, attenuated at the top, twice as long as the segments of the calyx, inserted below the divisions of it; anthers three-celled, roundish, whitish; the rudiment of a pistil in the middle: calyx of the female flowers four-lobed, two of the lobes a little bigger; germ ovate, acute, compressed, green; stigma villose, purple; calyx berried, enlarging, at first embracing the germ to the middle, but afterwards becoming like a berry, oblong, blunt at the end, four-lobed, inclosing the seed, white, pellucid; seed small, black. Native of the West Indies, in lofty mountains and in shady places, flowering in Spring.—Sw. Browne calls this the *large prickly nettle*, which he could only find in Blue Mountain Valley.

2. LAPPULACEA.

Leaves alternate, ovate, somewhat scabrous; flowers terminating, sub-sessile, monoecious; seeds three, cornered; stems diffuse.

3. SESSILIFLORA. SESSILE-FLOWERED.

Leaves alternate, lanceolate-ovate, crenate; racemes very short, axillary; flowers monoecious, distinct; stem erect.

4. ELATA. ELATE.

Leaves alternate, ovate-acute, serrate; stem arboreous; branches almost naked, racemiferous; flowers dioecious.

The following species are opposite-leaved.

5. MICROPHYLLA.

Humilior, disticha, diffusa, compressa, oblique assurgens; foliolis minimis. Browne, p. 336. *Urtica* 4.

Leaves ovate, acute, quite entire, with smaller ones ovate, opposite, and intermixed; flowers dioecious; stems almost simple, ascending.

Browne

Browne calls this the *little reclining nettle* with very small leaves; and refers to a plant of Sloane, which is the *parietaria*.

6. PARIETARIA. WALLE.

Parietaria foliis ex adverso nascentibus, urticae racemiferae flore.—

Sloane, v. 1, p. 144, t. 93, f. 1.

Leaves opposite, lanceolate, quite entire, narrower on one side.

Roots numerous, long, thready; stem herbaceous, suffrutescent at bottom, from two to eight feet in height, branching very much, erect, angular, four-sided, striated; branches long, sub-divided, quadrangular, red; branchlets filiform, opposite to the leaves, loose, smooth; leaves three-nerved, veined, ciliate at the edge; leaflets of the same shape, but twice or four-times smaller; petioles long, spreading, red; racemes axillary, terminating, opposite; peduncles longer than the petioles, filiform, coloured, four-sided, erect, smooth. Flowers dioecious; females very small, on paniced racemelets; seed very small, black, and shining. Native of high mountains, and flowering throughout the year.—Sw.

7. RETICULATA. NETTED-LEAVED.

Leaves opposite, oblong, acute, netted underneath; stipules ovate, entire; racemes paniced; leaves shorter.

8. DIFFUSA. DIFFUSED.

Leaves opposite, ovate, acutely serrate, hispid; stipules rolled back; racemes paniced, longer than the leaf; stems procumbent.

9. RUFA. RED.

Entirely hirsute; leaves opposite-oblong, serrate; stipules roundish, permanent; racemes terminating; stem suffrutescent, branched.

10. NUDICAULIS. NAKED-STALKED.

Leaves sub-terminating, opposite, oblong-acuminate, entire, three-nerved; stem angular, naked below, racemed; flowers dioecious.

11. CILIATA. CILIATE.

Leaves opposite, ovate, ciliate, serrate; flowers terminating, aggregate, sub-peduncled, monoecious; stem divaricate.

12. RADICANS. RADICANT.

Leaves opposite, cuneate-ovate, crenate, shining; flowers axillary, sub-sessile; stem and branches radican.

13. NUMMULARIFOLIA. MONEY-LEAVED.

Nummularia saxatilis minima repens, foliis crenatis villosis, floribus albis. Sloane, v. 1, p. 208, t. 131, f. 4.

Leaves opposite, orbicular, crenate, hirsute; flowers terminating, clustered, monoecious; stem filiform, simple, creeping.

This small repent plant shoots forth hairy roots from its joints. The stalks are small, round, hairy, jointed at every half inch: leaves round, pale-green, rough, a quarter of

of an inch in diameter, slipt about the edges, on inch-long petioles. The flowers come out in tufts, small, and white. It grows on the sides of rocks, which it covers among the mountains near Hope-River in Liguanea.—*Sloane*.

14. DEPRESSA. DEPRESSED.

Leaves opposite, roundish, crenate, smooth; flowers terminating, clustered; stem creeping, sub-divided.

15. SERRULATA. SERRULATE.

Leaves opposite, lanceolate, serrate, smooth; peduncles axillary, shorter than the leaves; flowers in little heads; stem frutescent, angular.

16. LUCIDA. SHINING.

Leaves opposite, semi-pinnate, shining; peduncles axillary, longer than the leaf; flowers in little heads; stem frutescent, angular.

17. CUNEIFOLIA. CUNEATE-LEAVED.

Leaves opposite, cuneate, ob-ovate, toothed at the top, the alternate ones larger; racemelets peduncled; flowers monoecious.

Besides the above native species the *dioica*, or great European nettle, and the *urens*, or small nettle, have been introduced.

See DWARF ELDER.

NETTLE-TREE.

BOEHMERIA.

CL. 21, CR. 4 — *Monoecia tetrandria*. NAT. OR.—*Urticæ*.

So named in honour of G. R. Boehmer, professor of anatomy and botany in the university of Wittenberg.

GEN. CHAR.—Male flowers in the same plant with the females, either distinct or mixed: calyx a one-leaved perianth, four-parted to the base; parts lanceolate, acute, somewhat erect, coloured; no corolla; no nectary; stamens four filaments, longer than the calyx, subulate, upright; anthers roundish, ovate; pistil a rudiment or none—The females have no calyx, but numerous crowded ovate-acuminate scales; no corolla; the pistil has an ovate compressed germ between each scale; a filiform, erect, permanent, style; and a simple pubescent stigma; there is no pericarp; seed roundish, compressed, margined. This genus, Swartz observes, is intermediate between *urtica* and *parietaria*. There are only five species, four of which are indigenous to Jamaica.

1. CAUDATA. TAILED.

Fruticosa; foliis amplissimis, ovatis, serratis; spicis longissimis, tenuibus, ex alis propendentibus. Browne, p. 338. *Urtica* 11.

Leaves opposite, ovate-acute, serrate; racemes very long, pendulous; flowers dioecious; stem suffruticose.

This grows in the cooler woods of Jamaica, and is furnished with very broad leaves.—*Browne*.

2. CYLINDRICA,

2. CYLINDRICA. CYLINDRICAL.

Urtica racemosa humilior iners. Sloane, v. 1, p. 124, t. 82, f. 2.

Leaves opposite, ovate-acuminate, serrate; racemes spiked, axillary, erect, simple.

Root strong, and deeply fastened in the earth; stem herbaceous, dividing into several opposite branches. The leaves are opposite, have three longitudinal veins, and are placed on pretty long footstalks; they do not sting. The flowers are axillary, on inch-long racemes or catkins, which are not divided.

3. RAMIFLORA. BRANCH-FLOWERED.

Frutescens; foliis rugosis ovatis, in acumen productis; ramulis gracilibus. Browne, p. 338. *Urtica* 10.

Leaves alternate, broad-lanceolate, acuminate, serrate, wrinkled; flowers aggregate, axillary and lateral, monoecious distinct; males three-stamened.

This is a shrub eight feet in height, with long branches; leaves sickle-shaped, rugged, on very short petioles, hanging forward, placed alternately towards the ends of the twigs, very different in size, being two inches and a foot in length on the same twig. Male flowers small, yellowish, numerous, aggregate, on the leafless old branches; females whitish, on the younger twigs, to the very ends.—*Jacquin.*

4. HIRTA. HAIRY.

Leaves alternate, ovate-acute, serrate, hirsute; flowers monoecious, heaped, axillary, mixed.

NHANDIROBA—See ANTIDOTE-COCOON.

NICARAGUA, BASTARD—See BRAZILETTO.

NICKARS.

GUILANDINA.

CL. 10, OR. 1.—*Decandria monogynia.* NAT. OR.—*Lomentaceæ.*

GEN. CHAR.—See Horse-Raddish Tree, p. 385. There are two species of nickars natives of Jamaica.

B. BONDOC.

Lobus echinatus fructu flavo foliis rotundioribus. Sloane, v. 2, p. 40.

Inermis, seminibus flavescentibus. Browne, p. 228.

Prickly; pinnae ovate, with solitary prickles on the leaflets.

This is a climbing plant. The stem grows at first erect, but afterwards twines about the neighbouring trees and shrubs. The leaves are about a foot and a half long, each having many pairs of leaflets, which are ovate and entire; the principal mid-rib is armed with short crooked single thorns, placed irregularly; the stalks are also armed with thorns, which are larger. The flowers are on long axillary spikes; petals equal, concave, yellow; legume broad, thick, three inches long and two broad, closely armed with

with slender spines, opening with two valves, each inclosing two hard seeds, about the size and shape of children's marbles, of a shining yellow colour, containing a bitter kernel. It grows more frequently in the inland parts of the island.

2. BONDUCELLA.

Lobus echinatus fructu caesio foliis longioribus. Sloane, v. 2, p. 41.
Spinosa, foliis bipinnatis ovatis cum acumine, seminibus cinereis.—
 Browne, p. 228.

Prickly; pinnae oblong-ovate, with double prickles on the leaflets.

This differs from the other in having much smaller leaves, set closer together; and below each pair of leaflets are two short stiff crooked spines, which are opposite; the flowers are of a deeper yellow, and the seeds are ash-coloured. This weakly plant grows in many parts of Jamaica, and spreads a great way about the root, or rises among the neighbouring bushes if it finds but due support. The stalk and branches are very full of thorns that arch backwards; the seeds are grey, and, like the other, used by way of marbles by boys.—*Browne*. Corolla almost regular, with no claws to the petals; legume ovate, rhomboidal, swelling in the middle, but flattened at the sides, with spines all over it, stiff, but not pungent, ferruginous, bay-colour on the outside, pale within; the two valves very smooth on the inside, without any vestige of a partition. Seeds two or three, ovate-globular, very smooth and shining, seeming as if they had very fine, parallel, angular, clefts, but quite entire; of a livid lead colour, with a brown mark at the navel.—*Gartner*. These plants make a good fence. Grainger says the shell of both species contains a farinaceous nut of admirable use in seminal weaknesses; and that they are also given powdered to throw out the yaws. Browne also observes that the seeds, bark, and root, of both species, are thought to be astringents, and sometimes given in gleans; and the seeds toasted and powdered given to provoke the menses. Sloane notices that these seeds are often cast ashore on the north-west coasts of Ireland and Scotland. The plant is raised from seeds, which should be some days soaked in water before they are planted, to soften them.

X *Nickers* —There are two sorts of these trees which are called nickers, the boys playing with the cone or fruit as they do with marbles: The one hath a yellow cone, the other an ash-coloured one. Its prickles are short and crooked, as the cockspur-tree is; it hath a long spike, full of yellow flowers; the pods or husks are full of rough prickles, like the chesnut, but sharper, and so stiff as to prick the finger if you touch them; within this rough pod or case are four or five hard cones, which are called nickers, so hard that the teeth cannot crack them. The Indians and negroes make use of them in venereal cases, and say they purge and carry off the cause, and afterwards bind and strengthen the part. They grow also in the Eastern parts of the world; for the Egyptians, in Alexandria, account them a sort of guard for their children against witchcraft and sorcery, hanging them about their necks as amulets. The fruit, finely pulverized, and given, half a drachm, helpeth the meagrim, the torture of drawing the mouth of one side, as also convulsions, and falling sickness.—*Barham*, p. 114.

See HORSE-RADDISH TREE.

NIGHTSHADES.

NIGHTSHADES.

SOLANUM.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Lurida*.

GEN. CHAR.—See Calalu, branched, p. 141. Besides those species described under their different English names, the following species are indigenous to Jamaica.

1. DULCUMARA. SWEET.

Scandens, foliis ovatis utrinque acuminatis, fasciculis florum sub-umbellulatis sparsis. Browne, p. 175.

Stem unarmed, frutescent, flexuose, upper leaves hastate; racemes cymed.

Root perennial, woody; stem shrubby, roundish, branched, twisted, and climbing to the height of several feet; leaves alternate, petioled, ovate-lanceolate, quite entire, smooth, soft, veiny; the lower cordate, the upper more or less hastate; flowers in racemes or cyme-shaped panicles, but not properly in cymes, opposite to a leaf or terminating, nodding, purple; anthers large, yellow, or lemon-coloured and connate; berries elliptic, scarlet, very juicy, bitter, and poisonous; seeds flat, somewhat kidney-shaped, of a yellowish colour. This plant is also a native of Europe, where the berries excite purging and vomiting; where decoction of the whole plant is recommended in various diseases, as scurvy, rheumatism, inflammations, fevers, &c.

2. VERBASCIFOLIUM. MULLEIN-LEAVED.

Stem unarmed, shrubby; leaves ovate-tomentose, quite entire; corymbs bifid, terminating.

This is an unarmed tree, above the height of a man, with a trunk as thick as the human arm; the ends of the branches, the leaves, peduncles, and calyxes, are covered with a thick nap; peduncles terminating, erect, always bifid, with the branches again bifid; flowers white, inodorous.—*Jacquin*.

3. DIPHYLLUM. TWO-LEAVED.

Stem unarmed, shrubby; leaves in pairs, one smaller than the other; flowers in cymes.

This is an ever green stinking shrub, two or three feet high, with a trunk the size of a finger, woody, round, and blackish, and brown branches; the whole unarmed and smooth; branches and leaves mostly stretched out horizontally. Most of the leaves two together, on short petioles, by the side of each other; one lanceolate, bluntish, entire, from two to four inches long, the other about an inch, ob-ovate, very blunt, sometimes emarginate. Common peduncles very short, lateral, many-flowered, forming a sort of cyme; the proper peduncles pendulous at the back of the leaves; flowers small, with a five-toothed calyx; corolla white, deeply five-parted; segments lanceolate-acute; berry globular, smooth, succulent, orange-coloured, the size of a chick pea; seeds whitish yellow.—*Jacquin*.

4. JAMAICENSE. JAMAICA.

Stem prickly, shrubby; leaves wedged, wider in the middle, obtuse-angled, tomentose on both sides; rachises and calyxes prickly; prickles bent back.

Stem a fathom in height, branched, prickly; branches flexuose, round, tomentose, prickly.

prickly. Leaves in pairs, alternate, on very short petioles, wedged at the base, widening towards the upper part, angular, (but the angles so blunt as to be sometimes obliterated) sharp at the top, entire at the edge, scarcely repand, nerved, tomentose, and somewhat rugged on both sides, whiter beneath, and the mid-rib or rachis there prickly; prickles stout, short, reflexed, pale. Racemes lateral, much shorter than the leaves, simple, many-flowered; flowers pedicelled, sub-cymed; pedicels length of the raceme, crowded in two rows, filiform, one-flowered, loose, tomentose, prickly; calyx minute, prickly; corolla small, pale blue or white, with the segments reflexed, and tomentose without. Berry roundish, first green, veined with black, but wholly black when ripe, smooth, having a dot at the top, size of a red currant. Native of Jamaica in waste places.—Sw.

5. HAVANENSE. HAVANNA.

Solanum fruticosum bacciferum spinosum, flore cæruleo. Sloane, v. 1, p. 236, t. 145, f. 3.

Stem unarmed, frutescent; leaves oblong-lanceolate, quite entire, shining; racemes axillary.

Stem shrubby, three or four feet high, with upright, round, smooth, branches; leaves alternate, petioled, oblong, wedged at the base, with a short blunt tip, entire, nerved, smooth on both sides, pale beneath, thicker; racemes terminating, solitary, containing from four to seven flowers; peduncles one-flowered, short; calyx parted half way; segments oblong, permanent, white at the edge; corolla biggish, blue, the border half five-cleft and spreading; the segments wide and plaited; filaments very short; anthers converging, yellow, having two pores at the top.—Sw.

6. TRISTE. DULL.

Stem unarmed, frutescent; leaves lanceolate-oblong, sub-repand, smooth; racemes sub-cymed.

This is an upright shrub, eight feet high, and not handsome; leaves acute, dark green, petioled, alternate, seven or eight inches long; racemes lateral, thick, an inch and half long, simple, or bifid, warted with the falling off of the pedicels that first come out; flowers small, white, forming a sort of cyme; berries globular, of a dirty yellow colour.

See CALALU, BRANCHED—CANKER-BERRY—EGG-PLANT—POTATOES—TOMATOES—TURKEY-BERRIES.

NUTMEG, AMERICAN.

ANNONA.

CL. 13, OR. 7,—*Polyandria polygynia.* NAT. OR.—*Coadnuntate.*

GEN. CHAR.—See Alligator-Apple, p. 11.

MYRISTICA. NUTMEG.

This singular tree is said to have been brought from South America, and first planted at the Retreat estate, in Clarendon: it is noticed in Long's History, but does not appear to have been much cultivated since his time; there are two fine plants in the
botanic

botanic garden, Liguanea, raised by Mr. Wiles; and in the Hortus Eastensis it has been classed as a species of *annona*, with the trivial name *myristica*, in allusion to the resemblance in taste its seeds have to the nutmeg. It is also known by the name of *calabash nutmeg*. The following are its characters, taken from a careful examination of many of its flowers: Calyx a one-leafed perianth, deeply divided into three triangular coloured segments, shorter than the corolla; somewhat nervous and crispated; it is perforated by the style; corolla one-petaled, also perforated, and deeply divided into six unequal segments, three exterior and three interior; the fruit more than double the length of the calyx, of the same shape, when full grown of a yellow colour, striped with purple, and longer than the interior ones, which are sub-cordate, connivent, nervous, of the same colour as the others but less undulated; the stamens have no filaments; anthers numerous, sessile, forming a ring round the base of the germ as in *annona*, adhering, but easily separated: the pistil has a turbinate, sulcated, and trigonal germ, seated on the apex of the columnar style, which is long, perforating the calyx and corolla, to which it is so slightly attached as easily to slip through, leaving the central hole perfect; stigma sub-globular, bifid, purple, crowning the germ: pericarp a large berry covered with a hard, thick, leathery, or woody, bark, one celled; seeds many, nestling.

This grows to a large branchy tree, in habit resembling the *annonas*. The leaves come out alternately on thick short footstalks, they are oblong-oval, quite entire, from six to nine inches long, and about two and a half to three broad, smooth, of a pale green colour above, lighter below. The flowers come out from below the small twigs, which have a leaf on the opposite side, they are pendent on four or five inches long footstalks, which are bracted. Both leaves and twigs have a taste and smell somewhat resembling *angelica*. The seeds of this plant, which are a good substitute for nutmegs, vegetate easily when fresh, but will not keep long out of the ground.

It bears a considerable number of large round pods resembling the calabash, hanging from the branches by a long pedicle. The pods are from four to five inches diameter, and contain a multitude of nuts or kernels, of about one inch in length, and one-third of an inch in thickness, all packed close in a very singular regularity, so that, after displacing them, it is impossible to restore them to the same order and compactness as before. These kernels, when thoroughly dried, are of a light, reddish, brown, colour, impregnated with an aromatic oil, resembling that of the Eastern nutmeg, from which they differ so little in flavour and quality, that they may be used for similar purposes in food or medicine; the only perceptible difference to the taste is, that they are less pungent than the East Indian nutmeg. It was a long time before the tree at the Retreat bore fruit; at the time of its bearing it was about eighteen feet in height. It has since been cultivated by many gentlemen in different parts of the island, and may probably in a few years be adopted into general use, as well as furnish an article of export. I take it to be the same as that found in Guiana. When intended for exportation, it might be advisable to send them in the dry pods entire, or lay the kernels in lime water for a little while, drying them afterwards again in the sun, or a shady place.—*Long*.

See ALLIGATOR-APPLE—CHERIMOYA—CUSTARD-APPLE—SOUR-SOP.

OAK OF CAPPADOCIA—See WILD TANSEY.

OCHRA.

HIBISCUS.

CL. 16, OR. 6.—*Monadelphica polyandria*.

NAT. OR.—*Columnifera*.

GEN. CHAR.—See Changeable-Rose, p. 175.

ESCULENTUS.

ESCULENT.

Alcea maxima, malvæ roseæ folio, fructu decagono, recto, crassiore, brevior, esculento. Sloane, v. 1, p. 223, t. 133, f. 3. *Ramosus, hirsutus; foliis lobatis, irregulariter crenatis, fructu longiori.*—Browne, p. 285.

Leaves five-parted, pedate; inner calyxes bursting at the side.

This rises, with a soft herbaceous stalk, six feet high, or more, dividing at top into many alternate branches. The leaves are also alternate, standing singly on long round panicles from six to eight inches long, having a swelling at bottom, purplish, and hairy at both ends; they are five-lobed, frequently six inches long and seven or eight broad. The flowers are large, axillary, of a pale sulphur colour, with dark purple bottoms. The capsules, which are an excellent emollient vegetable, are of different sizes and forms in the varieties, and are generally eaten either cooked by themselves, or as an ingredient in soups. It is the chief vegetable in West-India pepper-pots, and renders them very palatable, rich, and nourishing. These capsules are frequently sliced across while green, dried, and sent to Europe, and retain for a great length of time, in that state, their rich mucilaginous flavour and quality. As a medicine ochra may be employed in all cases where emollients and lubricants are indicated. In Dr. Dancer's Medical Assistant a decoction of the leaves and pods is recommended in the place of linseed tea.

They are very cooling, emollient, and of great nourishment; very proper for diseases of the breast, and provoke urine, stone, and gravel, having all the virtue of the marsh-mallows. I advised a person that was in a deep consumption, and of a depraved appetite, of a cadaverous countenance, and a mere skeleton, to have always the dried seed of the okras by him, that he might not be without them all the year round; the which I ordered him to have beat into a fine flour, separating the husks from it, and so to thicken all his broths or soups with this flour; which afforded him so much nourishment, taking away his hectic fever, that, in less than twelve months, he was as strong and lusty as ever he was all his life-time, and gave me many thanks for my advice.—Barham, p. 123.

See CHANGEABLE-ROSE—INDIAN SORREL—MAHOE—MUSK-OCHRA.

OCHRA, BASTARD—See WILD-OCHRA.

OCHRA, MUSK—See MUSK-OCHRA.

OIL

OIL-NUT-TREE.

RICINUS.

CL. 21, OR. 8.—*Monoechia monadelphia.* NAT. OR.—*Tricoccæ.*

GEN. CHAR.—Male calyx a one-leafed perianth, five-parted; segments ovate, concave; no corolla; stamens very numerous filaments, filiform, branchingly connected below into various bodies; anthers twin, roundish. Female calyx a one-leafed, three-parted, perianth; segments ovate, concave, deciduous; no corolla; the pistil has an ovate germ, covered with subulate corpuscles; styles three, two-parted, from erect spreading, hispid; stigmas simple; the pericarp a roundish capsule, three-grooved, prickly all over, three-celled, three-valved; seeds solitary, sub-ovate.

1. COMMUNIS. COMMON.

Ricinus Americanus fructu racemoso hispido. Sloane, v. 1, p. 126.

Fruticosus assurgens, foliis majoribus peltato lobatis, lobis serratis acutis. Browne, p. 330.

Leaves deeply divided.

This tree, which is sometimes called *palma christi*, is of speedy growth, as in one year it arrives at its full size, seldom exceeding from fifteen to twenty feet. The root is biennial, long, thick, whitish, beset with small fibres; the trunk is sub-ligneous, with a large pith, round, thick, jointed, channelled, glaucous, of a purplish red colour, in some varieties whitish. The leaves grow singly, on very long footstalks, having a large pith and small hollow; the leaves are peltate, palmate, from eight to twelve-parted; the segments lanceolate-serrate, spread out in a ring, of different sizes, the three smallest below the footstalk. Flowers in terminating racemes, the males below, with a five-parted calyx, and about one hundred oblong white anthers, in different bundles, the whole having a globular figure; the females at the top, the calyx commonly five-parted, with three red, filiform, bifid, stigmas: the capsule is sub-globular, corticate, echinated all over with small spines, tricoccous; rind herbaceous, thin; the three component parts or cells ovate, papery, on one side convex, with a dorsal streak, on the other angular, and perforated with a cordate hole below the tip, two-valved. Receptacle columnar, three-cornered, widening above, entering, by a triple blunt end, the ventral perforations of the cells. Seeds solitary, biggish, ovate, convex on one side, very bluntly angular on the other, smooth, somewhat shining, sometimes livid, with cloudy spots, sometimes variegated like the abdomen of the spider with white lines, dots and stains, on a testaceous or brown ground; on the top is a fungous, thick, white, umbilicus, or navel.

When the bunches begin to turn black, they are gathered, dried in the sun, and the seeds picked out. Castor oil is obtained from them either by expression or by decoction. This oil burns clear and bright in lamps, and is fit for all the purposes of the painter, or for the apothecary in ointments or plasters. As a medicine it purges without a stimulus, and is so mild as to be given to infants soon after birth, to purge off the meconium. By many physicians it has been deemed a sovereign remedy in bilious, calculous, and nephritic complaints; but its taste is extremely nauseous, and, when frequently used, it is apt to relax the tone of the bowels. It is recommended to be given in clysters; and Dr. Canvane of Bath affirms, that when children cannot be made to swallow any medicine, if the navel and hypochondria be rubbed with this oil, it will produce

produce one or two physical stools. He adds, that given in small draughts, or by clyster, or by embrocation, it is an excellent and wonderful vermifuge. All oils are noxious to insects, but the castor oil kills and expels them. It is generally given as a purge after using the cabbage bark some days. In constipation and belly-ache this oil is used with remarkable success. It sits well on the stomach, allays the spasm, and brings about a plentiful evacuation by stool, especially if at the same time fomentations, or the warm bath, are used. Belly-ache is at present less frequent in Jamaica than formerly, owing to several causes: the inhabitants, in general, live better, and drink better liquors; but the excessive drinking of new rum still makes it frequent amongst soldiers, sailors, and the lower-order of white people. It has been known to happen too from visceral obstructions after intermittents, or marsh fevers, in Jamaica.

The oil will not make soap, and it contains such quantities of a residuum, like gum, as to be unfit for using on mahogany furniture, or on gun-locks, &c. Mixed with paint it does not dry unless some spirits of turpentine are added to it. If it be spilled upon paper, after a month or two the paper will bear ink nearly as well as if there was no oil upon it.

Mr. Hughes, in his History of Barbadoes, says that the oil extracted from the berries of the red negro oil bush, is less rank than that of the other varieties, and sometimes made use of by negroes in their soups. Geoffroy, speaking of these nuts, says that they purge violently, but, if the skin wherewith they are covered be carefully taken off, they lose their purgative quality, and may be eaten with safety. From not knowing this secret, continues he, new comers into America are often caught by the natives: this is certainly a mistake, as it is the taking out the small root leaves and not the skin, that renders them inoffensive. The leaves of this plant, from their soft emollient nature, are generally used for dressing blisters. The roots in decoction are looked upon as strong diuretics.

Dr. Cullen observes that castor oil, when the stomach can be reconciled to it, is one of the most agreeable purgatives we can employ. It has these advantages, that it commonly operates in two or three hours, seldom gripes, and is generally moderate in its operation; it is particularly suited to cases of costiveness, and even of spasmodic colic; is one of the most certain remedies in the dry belly-ache, or *colica pietonum*; has been experienced to be useful in various febrile complaints, in bilious colics, nephritic cases, worms, and especially the tape-worm. It is not heating nor irritating to the rectum, and is therefore suited to hæmorrhoidal persons. The only inconvenience attending this medicine is, that it is nauseous to those who dislike oil, and that, when the dose is large, it occasions sickness at the stomach. The most effectual means to obviate this, is to take it in a little ardent spirit, rum or brandy, but compound tincture of senna is much better: this, in the proportion of one to three-parts of the oil, intimately mixed, by being shaken together in a phial, makes the oil less nauseous, and therefore sit better on the stomach. The common dose is a table spoonful, or half an ounce, but many persons require a double quantity. It is remarkable that if this medicine be frequently repeated, the dose may be gradually diminished; insomuch, that persons of a costive habit, who at first required half an ounce, or more, for a dose, have afterwards found two drachms enough, at least to keep the belly regular.

The oil-nut plant is much cultivated in Jamaica; it is raised from the nut or seed, grows with a surprising rapidity to the height of fifteen or sixteen feet, and seems to flourish most in gullies, or near running water, in cool shady spots. The seeds being freed

freed from the husks or pods (which are gathered upon their turning brown, and when beginning to burst open), are first bruised in a mortar, afterwards tied up in a linen bag, and then thrown into a large pot, with a sufficient quantity of water (about eight gallons to one gallon of the seeds), and boiled till their oil is risen to the surface; this is carefully skimmed, strained, and kept for use.* Thus prepared it is entirely free from all acrimony, and will freely stay upon the stomach, when it rejects most other medicines. This oil is consumed on many of the plantations, in the boiling and still houses, during crop, and much preferable to the filthy stinking lamp-oil imported from North America and Britain; for it affords a clear lively light, emits no disagreeable smell, is obtained at less than one half the expence, and may be kept many years without growing foetid. When intended for medicinal use, the oil is more frequently cold-drawn, or extracted from the bruised seeds, by means of a hand-press. But this is thought more acrimonious than what is procured from coction.

The cold-drawn oil at first is perfectly limpid; but, after being kept for some time, acquires a pale tincture, resembling Lisbon wine, probably caused by the membrane which covers the kernels. It is administered with the greatest success in the belly-ache, and all obstinate constipations of the bowels, given from one to even four or five ounces. It is likewise taken, with perfect safety, by infants afflicted with worms, which it both destroys and sweeps away; and therefore much superior to calomel or tin powder. It is given to new-born children, within nine days, in a dose of one tea-spoonful every morning, mixed with a little molasses, or any other syrup, to purge off the meconium; which purpose it effectually answers, and has saved the lives of many thousand negro children. The retention of this excrement has been fatal to multitudes, by bringing on mortal convulsions, generally known here by the name of jaw-falling.†

The oil, externally used, is excellent in removing cramps, and pains arising from colds, and kills lice in the heads of children.

It is but of late that this article has made an article of the Jamaica exportation, and that only in very small quantities; it now forms part of the British *materia medica*, but is most usually obtained there from the seeds imported in barrels; the oil drawn in the West Indies not being encouraged, because it is a manufacture. What is intended for exportation should be packed in jars, well stopped with corks or plugs, covered with waxed cloth, and properly tied or wired, or in small tight casks. The oil is not subject to contract rancidity, unless it is made from parched or roasted seeds, which are impregnated with an empyreuma.—*Long, p. 712.*

Oil-Nuts.—These are so called from the great quantity of oil got out of them; and also vulgarly, but very erroneously, called *agnus castus*, they having no relation to that species;

* One gallon of nuts will yield about one quart of oil. The oil separates sooner if, towards the end of the boiling, a handful of sea salt is thrown into the cauldron. If the nuts be kept a few weeks they yield little or no oil.

† Some of the ablest physicians have concurred in preferring the oil obtained from nuts to olive oil, in vermicular cases; the reason of which is, that, as the worms have their bodies overspread with extremely minute pipes, which are necessary to their respiration; and which being plugged up or stopped, they immediately die; so oils are found to answer this effect; and nut-oil much sooner, and with more certainty, than any other; as its parts are less porous, and therefore better qualified to exclude the air, the want of which destroys them.

It is mentioned by some writers, that, in certain parts of Italy, it is a common practice for mothers to give their infants, once or twice a week fasting, pieces of toasted bread dipped in nut-oil; and that what they use for this purpose is extracted from the beech nut, and seldom fails to clear their bowels of these dangerous animalcules; the ricinus oil is equally powerful, and might be administered after the same manner.

species; but every body in Jamaica calls it *agnus castus*, or oil-leaves, which they put to their blisters instead of melilot, and use no other. The root, decocted and drank, cures the cholic and swelling of the belly and legs; and so doth the leaves, boiled with wild ginger and ground-ivy, and then fermented with a little sugar or melasses, which will purge very strongly. Planters have not only cured dropsies in negroes with this drink, but also the yaws and venereal complaints, taking away the gummous nodes, and pains in the joints. The leaves, applied to the head in fevers, remove pain; a cataplasm made of the green leaves, cassada flour, and a little oil of the nuts, applied to women's breasts, softens and discusses the coagulated milk and hardness; and, if not to be discussed, it will ripen it, bring it to digestion, and break it.

Negroes are troubled with a distemper in their legs, which they call a guinea-worm: The first appearance is a hard swelling, with much pain and inflammation; and some time after will appear, through the flesh and skin, the head of the worm, as small as a knitting-needle, which they take hold off, and draw it a little, and get it round the quilly part of a small feather; but if they draw it so hard as to break it, many ill accidents will attend the part, and sometimes gangrenes ensue. Now, to ripen and forward the work, make a poultice as before directed, and lay over it one of the leaves, which will soften and bring the worm out, by turning the feather every day, drawing a little at a time, and by degrees the worm will entirely come out, which sometimes will be several yards long, and not bigger than a thread; sometimes, barely anointing the part with the oil, and laying a leaf upon it, will do. The oil of this nut purges strongly; and I knew one that would boldly give an ounce or an ounce and an half, in what they call the dry belly-ache, which would go through the patient when nothing else would; outwardly, it is good for cold aches and pains, or cramps and contractions. Its oil will keep without being fetid or stinking, and therefore may be converted to several uses.—*Barham, p. 120.*

In Mr. Anthony Robinson's manuscript the following recipes are recommended:

For dry belly-ache.—"Take nut-oil, half a common spoonful, and a spoonful of rum, mix them together, and set the rum on fire; after burning for half a minute, extinguish the flame, and mix well with a spoon for one dose, to be taken every two hours until it operates. I have seen this, adds Mr. R. tried with success on a patient with all the symptoms of approaching belly-ache. The first dose gave him one stool, and the second gave him thirteen, which were sufficiently liquid, and took away the pain of the bowels entirely."

For the yaws.—"Take eight ounces of the nuts with the green skin; bruise them small, and infuse in twenty ounces of warm water all night, then add four ounces of rum. The dose is four spoonfuls in the morning, in yaws, ulcers, dropsy, &c." Of this medicine the late Dr M'Vicar Affleck says he made two trials, in the yaws, and one dose, in each case, made a cure, but the operation was so violent he did not expect his patients would have survived it, which prevented him from making further trial. It has been observed, he says, by some gentlemen who used it with great success, that two spoonfuls of beef brine was effectual in stopping the operation, when too violent, and that laudanum or opiates of any kind have no effect; it was likewise found that one dose often effected a cure, but three times repeated always succeeded. In the cases of Dr. Affleck's patients, the beef brine was used, the negroes both recovered, and never had a return of the yaws. He thought an emulsion might succeed better, and to begin with small doses. He adds that in a dysentery, after the measles,

he found two ounces of castor oil, given every third day, and an injection of Indian arrow root decoction every night, and pap of the same for nourishment, succeed in the advanced stage of the disease. Externally applied the castor oil is in some degree acrid.

2. INERMIS. UNARMED.

Leaves peltate, sub-palmate, serrate; petioles glandular; fruits unarmed.

This is a stouter tree than the other, and bears larger and more productive nuts.—Stem the first year red and shining, afterwards ash-coloured with dusky spots. Leaves a foot and a half in diameter, on long petioles; glands the same in numbers and situation as in the common sort. Calyx reddish green; germ somewhat wrinkled, dark purple: fruit ovate, larger, shining, dark green, somewhat wrinkled, but without the least appearance of prickles. This so much resembles the other as scarcely to be regarded as a distinct species. The oil has the same qualities as the other, and this plant being more productive, is now most generally cultivated. It is a native of the Spanish West Indies, from whence it most probably was first brought to Jamaica, where it is now very common.

OIL PLANT OR OILY PULSE—See VANGLO.

No English Name.

OLDENLANDIA.

CL. 4, OR. 1.—*Tetrandria monogynia*, NAT. OR.—*Stellatæ*.

So named in memory of H. B. Oldenland, a Dane, who collected plants at the Cape of Good Hope, in 1695.

GEN. CHAR.—Calyx a four-parted perianth, the parts awl-shaped, superior, permanent; corolla one-petaled; tube cylindrical, closed by a beard; border four-parted, acute, spreading, a little longer than the calyx; the stamens are four simple filaments, within the tube, with small anthers; the pistil has a roundish inferior germ; a simple style, the length of the stamens; and a bifid obtuse stigma; pericarp a twin capsule, roundish, two-celled, opening between the teeth of the calyx; seeds numerous, very small. Two species are natives of Jamaica.

1. UNIFLORA. ONE-FLOWERED.

Aquatica foliis obovatis oppositis, floribus singularibus ad alas. Browne, p. 146.

Peduncles quite simple, lateral; fruits rough-haired; leaves sub-ovate, acute.

Stems branched and creeping; leaves opposite, lanceolate-ovate, sub-petioled, quite entire; flowers axillary, few, each on its proper peduncle; germs hispid; the petals are at the intestines of the leaves of the calyx; the anthers are large, incumbent, and elliptic; germ obversely pyramidal; seeds roundish. Browne calls it the *water oldenlandia*, and says it is very common about the Ferry; it is found frequently in the waters, and grows of a length proportioned to the depth of the place, and yields and bends with the stream; but both the leaves and stalks are of a reddish colour: sometimes

times it is found upon the banks, and then it is of a green colour, and a creeper; and generally runs more or less according to the quantity of moisture it can obtain.

2. CORYMBOSA. CORYMBED.

Minor caule teretimo, foliis linearibus oppositis, ramulis minimis floriferis et pedunculis ramosis vel simplicibus ad alas. Browne, p. 146.

Peduncles many-flowered; leaves linear-lanceolate.

The slender oldenlandia, with small narrow leaves, is found in the most barren savannas, and rises generally to the height of ten or fourteen inches; the footstalks of the flowers are sometimes simple, but oftener branched, and rise immediately from the axæ of the leaves, or shoot from the top of the smaller ramifications; all the parts of the plant are very delicate.—*Browne*. The flowers are white and small, the stems almost prostrate, four-cornered, with opposite branches; leaves long, narrow, opposite, marked with a longitudinal line; stipules opposite, connecting the leaves, with three awns at the tip.

3. UMBELLATA. UMBELLED.

Umbels naked, lateral, alternate; leaves linear.

This species is a native of the East Indies, and is called *Indian madder* or *ché*, and was introduced into this island, in the year 1791, by Hinton East, Esq. but, like many other valuable exotics, has been much neglected. It is a small plant, biennial, rarely triennial; root long, slender, with lateral fibres; when fresh, the bark is orange-coloured: stem erect, round, branchy; branches and leaves opposite. Flowers terminating, small, white, numerous; umbel composed of small three-cleft umbellates; bractes minute, awl-shaped. It thrives in sandy ground, and is much cultivated in the East-Indies, and used in dying red, purple, a deep clear brown, orange, and to paint the red figures on chintz. It is the bark of the root only which possesses this dying principle; when fresh it tinges the spittle yellow, and leaves a slight degree of acrimony. It impregnates cold water or spirits with a straw colour: to boiling water it gives a brownish porter colour. The watery infusions and spirituous tinctures are changed into a bright and deep red by alkaline substances; and are rendered paler, or nearly destroyed, by acids. The colouring powers of this root are said to improve by keeping three or four years.

OLD MAN'S BEARD.

TILLANDSIA.

CL. 6, OR. 1.—*Hexandria monogynia*.

NAT. OR.—*Coronariæ*.

So named in honour of Elias Tillandsius, author of *Flora Aboensis*, and professor of physic at Aboa, 1673.

GEN. CHAR.—Calyx a one-leafed perianth, trifid, oblong, erect, permanent; segments oblong-lanceolate, acuminate; corolla tubular, one-petaled; tube long, ventricose; border trifid, obtuse, erect, small; stamens six filaments, as long as the tube of the corolla; anthers acute, in the neck of the corolla, incumbent; the pistil has an oblong germ, acuminate both ways; style filiform, the length of the stamens; stigma trifid, obtuse; pericarp a long capsule, obtusely three-cornered, acuminate.

acuminate, one or two-celled, three-valved; seeds many, fastened to a very long capillary pappus. Fifteen species of this genus are indigenous to Jamaica; the following, and those described under the article *wild pine*.

1. USNEOIDES. MOSSY.

Viscum caryophylloides tenuissimum, e ramulis arborum musci in modum dependens, foliis pruinæ instar candicantibus, flore tripetalo, semine filamentoso. Sloane, v. 1, p. 191, t. 122, f. 2, 3. *Renealmia* 1.—*Parasitica caule filiformi ramoso, geniculato longissimo; foliis subulatis.* Browne, p. 193.

Filiform, branched, intorted, rugged.

Stem the bigness of a thread, the skin whitish, as if covered with hoar-frost, within tough and black like a horse-hair. Many of these together stick on the branches of the ebony or other tree superficially by the middle; sending down on each side some of the same stems, very often a yard long, hanging on both sides, curled or turning and winding one within another, and resembling an old man's beard, whence its common name in Jamaica. The stems are branched, and the branches, which are two or three inches long, are set with roundish white frosted leaves. The flowers come out at the end of the branches.—*Sloane*. This slender parasitical plant is found upon the trees in many parts of Jamaica, but does not grow so common nor so luxuriantly as it does in the more northern provinces of the main continent, where it is said to over-run whole forests. It is frequently imported to Jamaica from North America for the use of saddlers and coachmakers, who commonly stuff their pannels, cushions, &c. with this weed. In Louisiana, and other neighbouring settlements, this plant is very carefully gathered and stripped of the bark, and the fibres, which are very like, and by no means inferior to, horse-hair, made into mattresses, cushions, pannels, &c. It is manufactured by tying the stalks in bundles, and sinking them in water, or burying them under ground in a moist place, until the bark rots; they are then taken up, boiled in water, and washed until the fibres are quite cleared of the pulp. These are not only used instead of horse-hair, but are so very like it as not to be distinguished, without strict examination. The banana birds nest is always made of the fibres of this plant, and generally found hanging by a few threads from the tops of the most expanded branches of the most lofty trees, especially those that spread over ponds or rivers.—*Browne*.

2. RECURVATA. RECURVED.

Viscum caryophylloides minus, foliis pruinæ instar candicantibus, flore tripetalo purpureo semine filamentoso. Sloane, v. 1, p. 190, t. 121, f. 1. *Parasitica parva pruinosa, scapo tenui bifloro.* Browne, p. 194.

Leaves awl-shaped, rugged, reclined; culms one-flowered; glume two-flowered.

Roots filiform, clustered, whitish; stems aggregate, simple; or leaves constituting the stem, sheathing at the base, so that the plant is rather stemless. Sheaths of the leaves alternate, half-embracing; leaves filiform-subulate, compressed, plano-convex, slightly channelled, recurved at the end, pubescent, and mealy, with ash-coloured scales. Peduncles terminating from the middle of the leaves, filiform, round, two or three inches long; spathe two-leaved, two-flowered; leaflets equal, lanceolate-acuminate,

minate, concave, erect, mealy; one flower sessile, the other peduncled within the spathe. Spathe one-leaved to each flower, sheathing, lanceolate, smooth, ash-coloured, inclosing the flower. Calyx three-leaved, leaflets lanceolate, concave, smooth, dusky red; petals three, lanceolate, blue, blunt at the end, almost inclosed by the calyx. Filaments inserted into the base of the corolla, awl-shaped; anthers oblong, yellow; style short and thick; stigma obtuse, simple; capsule long, round, awl-shaped, three-cornered, three-celled, three-valved; valves revolute; seed-down capillary. Native of Jamaica, on old rotten trees.—Sw. The fibres of this plant are interwoven and matted into each other, and wrapped about the arms and branches of trees; from which, though sometimes it be on the under side of the bough, rise straight up several leaves, the under parts whereof inclose one another like bulbs, making, in their inward concave sides, a cavity to hold rain. The leaves always look as if covered with hoar-frost; the flower is purple.

See WILD PINE.

OLD WOMAN'S BITTER.

CITHAREXYLON.

CL. 14, OR. 2.—*Didynamia gymnospermia*. NAT. OR.—*Personatæ*.

GEN. CHAR.—See Fiddlewood, p. 291.

CINEREUM. ASH-COLOURED

Fruticosum, cortice cinereo, foliis oblongo ovatis oppositis, petiolis marginatis pedatis, floribus spicatis, fructu majori. Browne, p. 264.

Branches round; calyxes toothed.

This is a tree rising with a round upright trunk, not more than a foot in diameter, to the height of fifteen or twenty feet, with a handsome branching head. Leaves oblong-oval, acuminate at both ends, entire, shining, commonly opposite, but sometimes alternate, and frequently three together, of different sizes, but mostly above half a foot in length. The petioles have often a few glandular holes on each side above, exuding honey drops in the younger ones: racemes terminating, dense, quite simple, pendulous, nine or ten inches long; flowers small, numerous, odoriferous, on short pedicels; corolla white; berries succulent, shining, soft, roundish, first green, next red, and finally black.—Sw. Browne says that it rises eight or nine feet, and is common in all the savannas of Jamaica; that the veins of the leaves, and all the tender buds, are of a brown colour; the bark of the trunk and lower branches of a whitish ash-colour, and is called *old woman's bitter*. The French call it *bois cotelet*.

See FIDDLEWOOD.

OLEANDER—See SOUTH SEA ROSE.

OLIVE BARK-TREE.

BUCIDA.

CL. 10, OR. 1.—*Decandria monogynia*. NAT. OR.—*Holoraceæ*.

Browne

Browne calls this *buceras*, from the termination of the spikes resembling a bull's horn. Linneus changed it to *bucida*.

GEN. CHAR.—Calyx a one-leafed perianth, bell-form, obscurely five-toothed, superior, permanent; no corolla; stamens ten capillary filaments, inserted into the base of the calyx, and longer than it; anthers cordate, erect; the pistil has an inferior ovate germ; a filiform style, the length of the stamens; stigma obtuse; the pericarp is a dry berry, ovate, one-celled, crowned with the calyx; seed one, ovate. There is only one species, a native of Jamaica.

BUCERAS. BULL-HORNED.

Mangle julifera foliis subrotundis versus, summitates latissimis, confertim nascentibus, cortice ad coria densanda utili. Sloane, v. 2, p. 67, t. 189, f. 3. *Ramulis flexuosis tenuioribus, foliis obovatis confertis, spicis plurimis terminalibus.* Browne, p. 221, t. 23, f. 1.

This tree grows to a very considerable height, but not of a proportionate thickness, some having been seen seventy feet high, and five in circumference four feet from the ground. The branches and twigs are divaricate or flexuose, roundish, smooth, and even. The leaves are crowded at the forkings of the twigs; they are two inches long and one broad, near the further end, where broadest, on inch-long petioles, ob-ovate, quite entire, nerved, veined, smooth, and the younger ones are hoary underneath. Flowers in spikes, from the axils of the crowded leaves, simple, longer than the leaves, spreading, many-flowered; peduncles round, long, hoary; flowers yellowish. Calyx hoary, without tomentose within; filaments twice as long as the calyx; anthers roundish, yellow; germ flattened, with ten streaks at the base; style subulate, hirsute at the base.

This tree is called the *black olive* in Jamaica; but in Antigua, where it is equally common, goes by the name of *French oak*. It is a native of the lower swampy lands, or adjoining banks, and grows to a very considerable size. It is frequent about the Ferry, and remarkable for its slender crooked branches, and the tufted disposition of its leaves. On the flower spikes of this tree you may sometimes find one or more fructifications that shoot into a monstrous size, being seldom under three inches in length, though never above a line and a half in diameter; and something in the form of a bull's horn. It is reckoned an excellent timber tree; and the bark is greatly esteemed among the tanners.—*Browne*.

Barham mixed the bark of this tree with that of the mangrove, and says he made an excellent restringent styptic water of it. In the French islands it is called *grignon*. X

OLIVE MANGROVE.

AVICENNIA.

CL. 14, OR. 2.—*Didynamia angiospermia.*

N. T. OR.—*Personate.*

This was so named in honour of a famous oriental physician.

GEN. CHAR.—Calyx a five-parted permanent perianth; leaflets sub-ovate, obtuse, concave, erect; increased by three scales; corolla monopetalous; tube bell-shaped, short; border bilabiate; upper lip square, emarginate, flat; lower trifid, divisions

divisions ovate, equal, flat; stamens four subulate erect filaments, the two front ones rather shorter, bent back to the upper lip; anthers roundish, twin; the pistil has an ovate germ; a subulate erect style, the length of the stamens; stigma bifid, acute, the lower division bent down; pericarp a coriaceous capsule, rhomboidal, compressed, one-celled, two-valved; seed one, large, the form of the capsule, constructed of four fleshy folds, germinating. There is only one species, a native of Jamaica.

TOMENTOSA. HAIRY.

Mangle laurocerasi foliis flore albo tetrapetalo. Sloane, v. 2, p. 66.

Foliis integris oblongis oppositis, petiolis crassis brevissimis sub amplexantibus, floribus racemosis. Browne, p. 263.

Leaves cordate-ovate, tomentose underneath.

This tree agrees mostly with the mangrove, rising not above fifteen or sixteen feet high; its trunk is not so large, having a smooth whitish green bark; and from the stem are twigs propagating the tree, like the mangrove. The branches at top are jointed towards the ends here and there, where the leaves come out opposite, on very small petioles, two inches and a half long, one inch broad in the middle, smooth, soft, having one large rib of a dark green colour; the flowers are many at the top of the branches, white, and tetrapetalous.—*Sloane*. It varies with acuminate leaves, more or less hoary underneath.—*Sw*. This tree is frequent near the sea, both in the north and south-side of Jamaica; and remarkable on account of its cineritious colour, and the narrow form of its leaves. It grows in a low moist ground, and rises commonly to the height of fifteen or eighteen feet. Its capsules are compressed, and somewhat roundish, but irregular and obliquely lengthened; and contain each a compressed foliaceous seed, that swells and germinates before it falls.—*Browne*.

OLIVE, WILD—See WILD OLIVE.

ONION.

ALLIUM.

CL. 6, OR. 1.—*Hexandria monogynia*.

NAT. OR.—*Spathaceæ*.

GEN. CHAR.—See Eschalot, p. 284.

CEPA.

Scape swelling out below, and longer than the columnar leaves.

The common onion, as well as a larger variety, the Portugal or Madeira, thrive very well in Jamaica, when raised from imported seeds; and have a much milder and sweeter taste than those brought from Europe or America. The seeds should be sown in a dry time, when the ground is not moist, but should be well dug and levelled.

Scallions, which are so generally cultivated in Jamaica, are a kind of onion, which never form any bulbs at the roots, and are produced from decayed onions that begin to sprout; but most generally propagated by parting their own roots. The many domestic purposes to which these useful vegetables are applied are too well known to require notice here; their nature is to attenuate thick viscid juices, consequently a plentiful use of them in cold phlegmatic constitutions must prove beneficial. Many people shun them

them on account of the strong disagreeable smell and taste they communicate to the breath; which may be remedied by eating a few raw parsley leaves immediately after, which will effectually overcome the scent, and cause them to sit more easy on the stomach.

See ESCHALOT and GARLIC.

ONOBRYCHIS—See FRENCH HONEYSUCKLE.

OPUNTIA—See INDIAN FIG.

ORANGE.

CITRUS.

CL. 18, OR. 3.—*Polyadelphia icosandria*. NAT. OR.—*Bicornes*.

GEN. CHAR.—See Citron, p. 196.

AURANTIUM. ORANGE.

Petioles winged; leaves acuminate.

Of this there are two varieties, which grow plentifully in every part of Jamaica.

1. China Orange.—*Malus aurantia sinensis*. Sloane, v. 2, p. 181.
Fructu sphaerico, punctato, croceo, dulci; petiolis alatis. Browne, p. 309.

This is a middle sized tree, evergreen, with a greenish-brown bark, and prickly branches, which shoot out upwards into a roundish head; leaves broad-lanceolate, almost quite entire, smooth, dark shining green, standing on winged petioles; peduncles many-flowered, terminating. Corolla white; stamens twenty, connected into several parcels. Berry sub-globular, flattened, of a golden colour, shining, odorous, three inches in diameter, divided within into about nine cells, filled with a bladdery pulp, having a sweet-acid juice in it; rind fleshy, of a middling thickness, covered with a pellicle, which is somewhat biting and bitter to the taste. This description, from Loureiro, is particularly applicable to the common China orange, of which there are several varieties. The agreeable juice of the orange has been found efficacious in scurvy. When Commodore Anson sailed round the world, his men were surprisingly recovered from that disorder, by the oranges they found in the island of Tinian. This fruit varies much in appearance and flavour in different situations, owing most probably to the soil; they thrive best in a brick mould soil, and in the Red Hills of St. John's, which seem particularly congenial to all the orange kind. Mr. Long mentions he has seen fruit from a brick mould so exquisitely sweet, that when it was ripe, the whole rind was covered by a saccharine farina. There is no doubt that in Jamaica they might be brought to the utmost perfection, were proper care taken to improve them by grafting or transplanting.

2. Seville Orange.—*Malus aurantia vulgaris major*. Sloane, v. 2, p. 179. *Fructu sphaerico, punctato, croceo, acido; cortice interiori spongioso; petiolis alatis*. Browne, p. 308.

The Seville orange differs but little in appearance from that of the China, but is more

more hardy, and the leaves are larger and handsomer; the fruit is also of a more reddish colour and rougher rind. The taste is likewise very different, and not so agreeable as the other; but esteemed as far preferable for medical purposes, as a grateful acid liquor, allaying heat, quenching thirst, and promoting various excretions, and of considerable use in inflammatory disorders. It is also considered as a powerful antiseptic, and of great efficacy in the scurvy. The acid of oranges, by uniting with the bile, is said to take off its bitterness; and hence Dr. Cullen thinks it "probable that acid fruits taken in, are often useful in obviating the disorders that might arise from the redundancy of bile, and perhaps from the acrid quality of it. On the other hand, however, if the acids are in greater quantity than can be properly corrected by the bile present, they seem, by some union with that fluid, to acquire a purgative quality that gives a diarrhoea and the colic pains that are ready to accompany the operation of every purgative." Not only the juice but the rind of the Seville orange is of considerable medical efficacy, since, besides its use as a stomachic by itself, or infused with other bitter ingredients, it has been much celebrated in intermitting fevers; and, in testimony of its efficacy in the most obstinate agues, we find several authorities cited by professor Murray. It has also been experienced as a powerful remedy in menorrhagia, and in immoderate uterine evacuations; and, for its good effects in these disorders, we have not only the assertions of foreign physicians, but also those of Drs. Whytt and Hamilton. It gives out its flavour and taste readily to water, and is useful in all flatulencies in whatever form it be given; it also sits better on the stomach than most other corroborants. The leaves of the orange are not without their virtues, as well as the flowers, and, in particular, have been celebrated in convulsive disorders; and have been successfully given in the dose of a drachm at a time in nervous hysterical cases.—The young fruit of the Seville orange dried, is also used in medicine, under the name of *aurantia curaslaventia*; they are moderately warm bitter aromatics, of a sufficiently agreeable flavour. The flowers of the orange and citron-kind have been in great esteem as a perfume; they are highly odoriferous, of a somewhat warm and bitter taste. They yield their flavour, by infusion, to rectified spirit, and, in distillation, both to spirit and water. The bitter matter is dissolved in water, and, on evaporating, the decoction remains entire in the extract. The distilled water was formerly kept in the shops, but, on account of the great scarcity of the flowers, is now laid aside; it is called *aqua naphæ*. An oil distilled from these flowers is brought from Italy, under the name of *oleum* or *essentia neroli*. Both the distilled water and oil might be manufactured in great abundance in this island, and afford a valuable article of export; as they no doubt would be obtained from the flowers of every species of the *citrus*. The seeds of all the species have a pleasant bitterish taste, and would make very good emulsions, which might be successfully used, when the stomach is weak and languid, and cannot bear stronger bitters. The juice of the Seville or sweet orange, with common salt, Labat mentions to be used as a purge in the French islands; and the guts roasted are a maturing cataplasm. The late Dr. M. Vicar Affleck recommended the outer rind of the Seville orange, infused in a pint of water, and used for common drink, in an overflowing of the menses, or their appearance in the time of pregnancy.

See CITRON, LIME, and SHADDOCK, TREES.

OTAHEITE APPLE—See ROSE APPLE.

OX-EYE.

OX-EYE.

BUPHTHALMUM.

CL. 19, OR. 2.—*Syngenesia polygamia superflua.* NAT. OR.—*Compositæ.*

GEN. CHAR.—Common calyx imbricate; corolla compound, radiated; hermaphrodite stamens five; anthers tubular; the pistil has an ovate germ, filiform style; stigma thickish, undivided; female germ ancipital, style filiform, stigmas two; there is no pericarp, the calyx unchanged: seeds of the hermaphrodite solitary, oblong, crowned with a gashed manifold edge; of the females, solitary, compressed, with each edge cutting, crowned like the others; receptacle chaffy, convex. One species is a native of Jamaica.

FRUTESCENS.

SHRUBBY.

Chrysanthemum fruticosum maritimum, foliis glaucis oblongis, flore luteo. Sloane, v. 1, p. 260. *Sub-fruticosum maritimum incanum, foliis oblongis, floribus solitariis ad divaricationes ramorum.*—Browne, p. 320.

Leaves opposite, lanceolate; petioles two-toothed; stem shrubby.

This plant grows near the sea-side, and seldom rises above four feet high, in a tufted form. Stem whitish, the size of the little finger; branches towards the top, opposite, on which the leaves grow in opposite tufts; they are of unequal sizes, some narrow and long, others broad, the longest about an inch long, they are soft and hoary, having a whitish down, and ending in a scarcely discernible prickle. The flowers are produced at the ends of the branches in large heads, on the outside of which are many whitish small leaves, inclosing the flowers, which are many, close set together, of a yellow colour.—Sloane. Browne calls it *samphire*, or the *sea-side ox-eye*. He notices three other species of *bupthalmum*, one of which belongs to the genus *silphium*.

OX-EYE, CREEPING.

SILPHIUM.

CL. 19, OR. 4.—*Syngenesia polygamia necessaria.* NAT. OR.—*Compositæ.*

GEN. CHAR.—Common calyx erect, patent, squarrose; corolla compound, radiate; corollets hermaphrodite in the disk, many; females in the ray, fewer: there is no pericarp, calyx unchanged; seed down, margined, two-horned; receptacle chaffy; chaffs linear.

TRILOBATUM.

THREE-LOBED.

Chrysanthemum palustre, repens, minus, odoratum, folio scabro trilobato. Sloane, v. 1, p. 262, t. 155, f. 1. *Hirsutum, foliis trilobis, ad basin angustioribus, oppositis; floribus solitariis alaribus.*—Browne, p. 321.

Leaves opposite, sessile, wedge-form.

Stem jointed, creeping along the ground, at each joint many hairy fibres of a blackish-brown colour, with opposite leaves, rough, notched, and smelling aromatically.—

The peduncles are axillary, flowers yellow. It grows on the banks of rivers, and in low marshy lands, creeping to a considerable distance. Browne notices another species of this genus, *hirsutum foliis oblongis subserratis obtusis, floribus minoribus, pedunculis geminatis alaribus*, and both as species of the *bupthalmum*.

OX-EYE BEAN—See HORSE-EYE BEAN.

OYSTER GREEN—See SEaweeds.

PAJOMIRIOBA—See STINKING-WEED.

PALMA CHRISTI—See OIL-NUT.

PALM-OIL-TREE.

ELAAIS.

CL. 25.—*Dioecia hexandria.* NAT. OR.—*Palme.*

This name is derived from the Greek word for an olive, on account of the oiliness of the nuts.

GEN. CHAR.—Male calyx a six-leaved perianth; leaflets concave, upright; corolla one-petaled, six-cleft, upright, sharp, length of the calyx; stamens six filaments, subulate, length of the corolla; anthers oblong, sharp. Female calyx as in the male; corolla six-petaled; pistil an ovate germ; stigmas three, reflex; pericarp a fibrous drupe, ovate, somewhat angulated, oily; seed an ovate nut, obscurely three-sided, with three holes, three-valved, one-celled.

GUINEENSIS. GUINEA.

Palma, foliorum pediculis spinosis, fructu pruniforme, luteo, oleoso.
Sloane, v. 2, p. 113, t. 214.

Trunk erect, irregular from the stipes of the fronds, which continue a long time, and are longer the nearer they are to the frond; fronds pinnate, with a rigid rib fifteen feet in length, for four feet below the leaflets armed at the edge on both sides with awl-shaped spines, the uppermost hooked and bowed back, the middle ones straight, the lowest patulous, and twice as long as the rest: leaflets sword-shaped, acute, unarmed, folded back at the base, a foot and a half long, and an inch broad. After these have fallen the rigid rib remains sometime, and resembles a spine. Spadix axillary, a foot long, much compressed, erect, divided into fifty branchlets, five inches long, erect, the thickness of a finger, compactly spiked, imbricate, and irregularly disposed, with triangular acuminate tips. The branchlets, except the tip, are wholly covered with small flowers, each having a small roundish bracte at the base, the lowest on each branchlet being much larger than the others, with a lanceolate point. The flowers have

have a singular and very strong smell, like anise-seeds mixed with chervil leaves; fruit larger than a pigeon's egg; the pericarp variegated with yellow, black, and red, and so full of oil as to run out on being very slightly pressed; nut black, with longitudinal interrupted whitish streaks.—*Jacquin*.

Sloane describes a head of this tree brought to him from Guinea, as follows:—
“Roundish, about a foot and a half long, and one in diameter. The stem like a rope, two inches in diameter, composed of strong brown fibres. From every part of the stem issued crooked prickly petioles, about six inches long. Between the prickles lay the fruit, much less, but in shape and colour resembling a chesnut; each nut was surrounded by two or three brown scales, and covered with a pulp full of oil, of a saffron colour, and smelling like violets; each nut had a fibrous hilus. Under the oily pulp lay a hard brown shell, covered over with fibres, and about the size of a filberd, inclosing a white, hard, lignose, kernel. Of the leaves are made mats; and wine is got from a hole cut in the top. The oil tinges water of a yellow colour, and soap may be made of it.”

The palm-tree, from which the oil and wine are got. It is from the fruit that they get oil; when they are thorough ripe, there is, between the outward skin and the store, a yellow pulpy sweet substance; this pulp turns to a thick oil, like butter, as it grows old, and of a reddish-yellow colour; also, the inward kernel turns to oil in the same manner. It is an excellent suppling oil; the traders for slaves, when they expose them for sale, shave them very close, and then anoint their bodies, limbs, and joints, with it, which makes them look smooth, sleek, and young. From the body of the tree by tapping, and the branches before they have fruit, they get a liquor which is called palm-wine, and so strong as will inebriate or cause drunkenness.—*Barham*, p. 130.

This tree is not so frequent in Jamaica as it deserves, being chiefly cultivated by the negroes only. The nuts are covered with an oily pulp; when they are roasted, they taste very much like the outside fat of roasted mutton. The oil is obtained by boiling the nuts in water, when the oleaginous particles rise to the surface, and are skimmed off, and strained for use.

The negroes are fond of this oil, which sometimes makes it an ingredient in their food; but they oftener apply it by way of embrocation, for strains, or to discuss rheumatic aches, for which purpose it is very efficacious.—*Long*, p. 740.

PALMETO-ROYAL, OR THATCH, TREE.

THRINAX.

CL. 6, OR. 1.—*Hexandria monogynia*. NAT. OR.—*Palmæ*.

GEN. CHAR.—Calyx—Spathe universal, compound; spadix simple, branched, imbricate with proper spathes, in decussated spikes; perianth minute, six-toothed; no corolla; stamens six filaments, short, filiform, inserted into the base of the germ; anthers large, erect, bifid at the base and top; the pistil has a half-inferior ovate germ, surrounded by the calyx; style thickish, short; stigma widish, compressed, retuse, emarginate; the pericarp a one-celled naked berry; seed a single kernel, covered with a bony shell. There is only one species, which is a native of Jamaica.

PARVIFLORA. SMALL-FLOWERED.

Palma Brasiliensis prunifera folio plicatili seu flabelliformi caudice squammato. Sloane, v. 2, p. 121. *Palmacea, foliis flabelliformibus cum appendicula ad imum, petiolis tenuioribus flexilibus compressis.* Browne, p. 190.

Trunk from ten to twenty feet high, swelling at the base, unarmed, about six inches in diameter, of a clay colour. Fronds terminating, palmate, plaited, from one to two feet long, or more, with here and there prickles; divisions lanceolate, nerved, and marked with lines, rigid, almost equal: stipes longer than the leaves, round-flatted, smooth, flexible, unarmed. Spadix terminating, almost upright, two or three feet long; panicle branched; branches alternate, sub-divided, spreading; branchlets or spikes decussated, opposite, or in threes; flowers pedicelled, opposite, or in threes, placed on the rachis, small, hermaphrodite; berry roundish, the size of a small pea, almost juiceless; kernel white within, red in the middle. It grows in most of the honey-comb rocks in the island.

Palmeto-Royal.—This tree covers whole fields in many parts of the island; it grows both in the rocky hills, and low moist plains near the sea, but seems to thrive best in the former. It shoots by a simple stalk, and rises generally from four or five, to ten or fourteen, feet in height. It is always furnished with leaves of the form of a fan, sustained by slender compressed footstalks, and bears a great abundance of small berries, which serve to feed both the birds and beasts of the wood, when they are in season.—The trunk seldom exceeds four or five inches in diameter; it is called the *thatch-pole*, and is much used for piles in wharfs, and other buildings made in the sea; for it has been observed to stand the water very well, and is never corroded or touched by the worms. The footstalks of the leaves are very tough, and serve (when split and pared) to make baskets, bowstrings, ropes, and a thousand other conveniencies, where strength and toughness is required. The leaves are called *thatch*, and are daily used as such, and found to stand the weather for many years.—*Browne.*

PALMETO, SMALLER.

CHAMÆROPS.

CL. 23, OR. 2.—*Polygamia dioecia.*NAT. OR.—*Palmae.*

This generic name is derived from two Greek words signifying low shrub.

GEN. CHAR.—Hermaphrodite calyx—universal spathe compressed, bifid; spadix branching; proper perianth tripartite, very small; corolla tripartite; petals ovate, coriaceous, erect, acute, inflected at the tip; stamens six filaments, subulate-compressed, scarce cohering at the base; anthers linear, twin, growing to the interior side of the filaments; the pistil has three roundish germs; styles as many, distinct, permanent; stigmas acute; the pericarp three drupes, globose, unilocular; seeds solitary, globose. Male on a distinct plant, flowering in the same manner—calyx and corolla as in the hermaphrodite; stamens, a gibbous receptacle, ending in six filaments, not marked by perforations; the rest as in the hermaphrodite. One species is a native of Jamaica.

HUMILIS.

HUMILIS. HUMBLE.

*Palma non spinosa humilis fructu racemoso pruniformi, minimo pisti-
magnitudine. Sloane, v. 2, p. 118. Acaulis, foliis flabelliformi-
bus maximis, petiolis validis rotundis, spicis brevioribus partialibus.*
Browne, p. 330.

Leaves fan-shaped, very large; stipes smooth.

This plant is very frequent in Jamaica, particularly about the Crescent, and is often used for thatch, though not so good as the other leaves commonly employed for that purpose. The footstalks are exactly like so many joints of well grown walking canes, both in shape and size; but they soon wither and shrivel up. The berries are sweet, and much fed upon by birds.—*Browne*. This is known by the name of *fan-palm*.

The spadix is amentaceous and imbricated. The flowers are sessile, ranged in a special order round the ament, one rising from each squama, which squama is semi-circular, carnos, and placed at the base of a small floscule or depression: In some of the floscules I observed two floscules. The proper perianth is triphyllous, made up of three subtriquetrous concave coloured leaves, shorter than the corolla, which consists of three ovate petals, placed alternate with the leaves of the cup. The germ is compressed and subtrigonal, rising with a narrow base, and widening to the top, on which are placed six short subulated filaments; the anthers large, erect, sagittated; there is no style, the stigma is trigonal, the top of the germ is excavated.—*A. Robinson*.

PANIC GRASS.

PANICUM.

CL. 3, OR. 2.—*Triandria digynia*. NAT. OR.—*Graminæ*.

GEN. CHAR.—Calyx a two-flowered, two-valved glume; valves sub-ovate, nerved; the outer valve a little lower, very small; one floret hermaphrodite, the other neuter or male: corolla of the hermaphrodite a two-valved glume; the outer valve (in the bosom of the smaller calycine valve) flattish, nerved; the inner membranaceous, flat, with the edges bent in; often small, or very small; nectary two-leaved, very small, gibbous; in the neuter florets none; stamens three capillary filaments; anthers oblong; the neuter florets have no stamens; the pistil, in the hermaphrodites, has a roundish germ, two capillary styles; stigmas feathered, in the neuters none; there is no pericarp; the corolla adheres to the seed without opening; seed one, covered, roundish, flattish on one side. Twenty-one species of this numerous genus have been found in Jamaica.

The following species are spiked:

1. SETOSUM. BRISTLY.

Spikes compound; spikelets panicle-fascicled; bristles mixed with the florets and very long; peduncles almost smooth.

Height from two to four feet; culm simple, erect, round, smooth, leafy; leaves half a foot long, lanceolate, flat, entire, pubescent; sheaths embracing the culm, villose at the neck; spike terminating, compound, a foot long, composed of panicle-fascicled racemes, half an inch in length; rachis flexuose, bristly; spikelets two to four,

four, clustered, pedicelled, unequal, mixed with bristles, green; bristles several times as long as the florets, from one to three, inserted into the base, flexuose, appearing hispid when magnified, serrate. Pedicels very short and smooth; inner valve of the calyx larger, ovate, acute, keeled; corolline valves of the hermaphrodite equal, whitish; outer ovate, acute, somewhat keeled, concave, the other flat, included.—Filaments very minute. Corolline valves of the male barren; outer large, ovate, acute, concave; inner minute, flat. Seed ovate, inclosed in the corolline glumes of the hermaphrodites; the smaller florets mixed with the others are commonly empty; it approaches near to *P. Italicum*, but in that the spikelets are glomerate, on hirsute pedicels.—Sw.

2. COLONUM.

Gramen paniceum minimum humi stratum, spica divisa mutica, foliis variegatis. Sloane, v. 1, p. 107, t. 64, f. 3.

Spikes alternate, directed one way, awnless, ovate, rugged; rachis roundish.

Roots thready, annual; culms a span high, round, ascending, reddish, jointed, with a leaf at every joint; leaves even, broad, ferruginous spotted, which spots vanish when they are dry. Spike simple, directed one way, with a round weak rachis; spikelets alternate, very many, sub-sessile, directed one way, ovate, or somewhat oblong, without any bundles of hairs. Florets somewhat streaked; anthers purple; pistils white, turning purple. It grows in the savannas about Spanish Town.

3. BRIZOIDES. BRIZA-LIKE.

Spikes alternate, sessile, directed one way; two of the calycine valves much shorter than the corolla, and retuse, the third the same length with the corolla.

Culm from one to three feet high, simple, round, even; leaves broadish, not long, acute, erect, rugged at the edge, striated, sheathing at the base; the neck beardless; rachis terminating, almost a foot long, simple, linear. Spikes five or six, alternate, sessile, pressed to the rachis, directed one way; florets sub-sessile, approximating, in two rows on the same side, ovate, whitish. Two valves of the calyx equal, ovate, blunt, awnless; the third very small, roundish; valves of the corolla smaller, oblong; stigmas purple; seed fastened to the corolla, roundish.—Sw.

4. PILOSUM. HAIRY.

Spikes panicled, alternate, directed one way; spikelets in pairs, one smaller, acuminate, even; rachis compressed, hairy; culm divaricate, jointed.

Culm three or four feet high, branched, compressed, even; joints villose, large; leaves lanceolate, acute, even, rugged at the edge. Sheaths approximating, compressed, villose at the base; peduncles from the sheathing internodes, compressed, short. Spikes rigid; rachis linear, compressed, hairy; hairs long, thin, spreading; spikelets pedicelled, alternate, sharpish, somewhat compressed, striated. Outer calycine valve minute; inner ovate, nerved, concave; valves of the corolla ovate, very tender; anthers purplish; stigmas whitish; seed oblong, compressed a little, small; glume of the neuter corolla two-valved; outer valve larger, concave; inner very minute, flat; filaments none. Native of Jamaica in woody mountainous pastures.—Sw.

5. FASCICULATUM.

5. FASCICULATUM. FASCICLED.

Spikes panicked, alternate, erect, sub-fastigiate; spikelets directed one way, roundish.

Height two or three feet; culm jointed, erect, round, leafy, smooth; leaves a foot long, rounded at the base, broad-lanceolate, acute, streaked longitudinally, rough at the edge; sheaths long, striated, smooth, sub-villose at the edge and neck. Spikes terminating, half a foot long, sub-verticillate; rachis sub-flexuose, stiff, rough.—Florets roundish or ovate, small, brown; pedicels sub-biflorous, the upper ones one-flowered, capillary, somewhat hirsute. Outer valve of the calyx one-third the size of the other; inner ovate, concave, marked with longitudinal lines, appearing netted when magnified, ferruginous brown. Valves of the hermaphrodite corolla ovate, whitish, one smaller included; stigmas whitish; male corolla empty; outer valve like the inner valve of the calyx; inner smaller, whitish, ovate. Native of Jamaica in low grassy places.—Sw.

6. LINEARE. LINEAR.

Gramen dactylon, panicula longa, spicis plurimis gracilioribus et longis. Sloane, v. 1, p. 113, t. 70, f. 3.

Spikes digitate, in fours, or thereabouts, linear; florets solitary, directed one way, awnless.

Culms a foot and a half long, even, branched; spikes divided into many spikelets towards the top, which are linear, straight, narrow; flowers alternate below; outer scale of the calyx shorter, spreading, adhering to the rachis. Native of Jamaica in most savannas.

The following species are panicked.

7. NEMOROSUM. WOOD.

Panicle simple; branches distant, erect; florets remote, scattered, ovate, acuminate; culm decumbent, jointed; sheaths and neck hairy.

Height from one to two feet; roots and radicles very long, filiform; culm creeping at the base, ascending, somewhat branched, rooting at the joints, round, striated, pubescent or smooth, loose. Branches, from the sheaths of the leaves, somewhat hirsute. Leaves distich, obliquely elliptic at the base, unequal on the sides, terminated by a lanceolate point, quite entire, somewhat waved, very thin, and very finely streaked, smooth underneath, hairy above. Sheaths at the joints short, open in front, striated, hirsute, hairy at the neck; knots rather large, villose with white hairs. Panicles small, erect, with terminating and axillary peduncles; branches short, few-flowered; florets pedicelled, small, green. The two valves of the calyx are oblong, nearly equal, awned at the tip; the two valves of the corolla, in the hermaphrodite flower, are oblong, blunt, whitish, one of them smaller and included. Anthers pale; styles rather long; stigmas feathered, whitish. In the male flower the outer valve is ovate, acute, concave, and includes the inner, which is smaller, ovate-acute, and more tender; anthers purple.—Sw.

8. ACUMINATUM. ACUMINATE.

Panicles simple, shorter than the leaves; branches capillary, diffused; spikelets remote, ob-ovate; culm decumbent, jointed, branched; leaves lanceolate-subulate, erect; sheaths villose.

Height

Height a span; culm creeping, but, in a fertile soil, erect, round, tomentose; branchlets ascending, short, about an inch in length, leafy, sheathed, jointed, tomentose-hirsute; leaves half-embracing, short, broad-lanceolate, entire, acuminate, flat, extremely hirsute at the edge, soft; sheaths small, rough-haired, with the ligule hirsute. Panicles small, very short; racemelets simple; florets small, ovate, obtuse, on short waved pedicels. Inner calycine valve ovate, concave, striated, rough-haired; outer minute. Valves of the hermaphrodite corolla ovate; filaments the length of the glumes; anthers purple; stigmas villose, dark purple, short; seed oblong, shining. In the male or neuter floret, the outer valve is like the inner calycine valve, ovate, striated; the inner is very small, flat, whitish. Native of Jamaica in sandy fields in the mountains.—Sw.

9. RIGENS. STIFF-PANICLED.

Panicle simple, rigid, spreading; culm branched, decumbent; leaves horizontal, rugged.

Culm a foot high and more, decumbent, creeping a little, branched, jointed, sheathed, round, striated, smooth; sheaths at the base of the branches elongated, embracing, striated, smooth; branchlets ascending, filiform, strict, sub-divided, sheathed, leafy, round. Leaves half-embracing, lanceolate, broadish, an inch long, acuminate, rigid, striated, somewhat rugged to the touch; panicle small, oblong, composed of racemelets, which are alternate, distant, sub-divided, capillary, short, rugged; florets remote, ovate, minute; valves of the calyx almost equal, ovate, obtuse, concave, rigid, streaked with purple. Glumes of the corolla, in the hermaphrodite florets, a little less than those of the calyx, more slender, whitish; filaments short; anthers ovate, longish, bifid, vertical, whitish-yellow. Styles longer than the glumes; stigmas villose, long, recurved, whitish; seed roundish, shining, very minute. In the neuter floret, the outer valve of the corolla is ovate and striated, the same size with the inner glume of the calyx; the inner valve is tender, less, whitish. This grass is distinguished by its rigidity; it grows in high mountains, with *apluda zeugites*—(see mountain reed grass.)—Sw.

10. FUSCUM. BROWN.

Panicle simple; branches erect; florets directed one way in pairs, one on a shorter pedicel; culm erect, sub-divided; leaves broad-lanceolate.

Height from one to two feet; culm jointed, round, pubescent; leaves retuse, and oblique at the base, entire, smooth, striated, three or four inches long; sheaths long, with a contracted ligule, appearing somewhat hirsute when magnified. Panicles peduncled, an inch and more in length; peduncles long, filiform; florets brownish green, ovate; pedicels now and then two-flowered; outer valve of the calyx less, inner ovate; valves of the corolla ovate-obtuse, whitish; anthers whitish; seed ovate, inclosed in the glumes. Outer valve of the corolla in the male or neuter flower very like the inner valve of the calyx; inner small, ovate, flat, more tender, whitish.—Sw.

11. LAXUM. LOOSE.

Panicle simple, nodding; branches capillary; spikelets approximating, alternate, pressed close; culms simple, filiform, flaccid; leaves linear-lanceolate.

Height from two to four feet; culm sub-divided, compressed a little, striated, even; leaves striated, even, spreading; sheaths close, even. Branches of the panicle sub-divided,

divided, spreading, almost upright, flexuose; florets very minute, pedicelled, pressed close, approximating, ovate, bright green. Outer valve of the calyx less by half; inner a little larger; all ovate-acute, concave, striated, bluntly keeled at the edge, appearing ciliate when magnified. Valves of the corolla in the hermaphrodite floret equal, less than the calycine glumes, ovate, concave. Filaments very short, anthers yellowish; stigmas blood-red; seed roundish, shining, extremely small. In the neuter floret the outer valve resembles that of the calyx. Native of Jamaica in dry woods, flowering at the end of the year.—Sw.

12. FLAVESCENS. YELLOW.

Panicle simple, erect, stiff; branches sub-fastigiate, the lowest opposite; spikelets approximating, directed one way; pedicels two-flowered.

Height three or four feet; culm simple, erect, round, at top compressed and pubescent; leaves long, wide, flat, entire, striated, spreading, even; sheaths close, somewhat rough-haired; branches of the panicle simple, alternate, spreading, the lowest somewhat compressed, even. Florets pressed to the rachis, ovate, blunt, smooth, yellow; pedicels equal; outer valve of the calyx only one-third the size of the inner one; both ovate, obtuse, concave, striated, pellucid; valves of the hermaphrodite corolla ovate, concave. Filaments short; anthers small, purple; stigmas villose, blood-red; seed oblong, shining, yellow. Outer valve of the outer floret concave, ovate, striated; inner flat, more tender, whitish. This species is singular in the colour, being constantly yellow, which is not the case in the rest: it occurs, but rarely, in dry places in the southern parts of Jamaica.—Sw.

13. DIFFUSUM. DIFFUSED.

Gramen miliaceum majus, panicula minus sparsa, locustis minimis.
Sloane, v. 1, p. 114, t. 72, f. 1.

Panicle somewhat simple, capillary, spreading; spikelets distant; culm decumbent, simple; leaves linear, hairy at the neck.

Culm a foot, sometimes two, in height, ascending, filiform, round, leafy, smooth; leaves long, sharp, erect; sheaths striated, villose at the neck and throat; knots purple; branches of the panicle alternate, flexuose, somewhat rigid. Florets rather distant, pedicelled, ovate, acute, smooth; outer less by half than the other. Glumes of the hermaphrodite corolla equal, less than the calyx, pellucid, whitish; anthers purple; stigmas villose, blood-red; seeds roundish, yellow, shining. In the male floret outer valve ovate, acute, smooth; inner minute, flat, whitish; filaments one to three, minute, barren; common in dry places.

14. ORYZOIDES. RICE-LIKE.

Panicle almost simple; branches erect; florets somewhat remote, ovate-acute; culm erect, undivided; leaves broad-lanceolate, rounded at the base; sheaths even.

Culm three or four feet high, round, leafy, smooth; leaves a span long, entire, longitudinally striated, smooth; sheaths more contracted; panicle a foot long; branches alternate, stiffer, angular, sub flexuose, smooth; spikelets large, smooth, pedicelled, commonly in pairs, one shorter than the other. Outer valve of the calyx larger but shorter, wide, acute, slightly keeled; inner a little longer, ovate, keeled, striated.

striated. Corolla pale, outer valve ovate, acute, including the inner, which is smaller and flattish; anthers pale, seeming barren; style bifid; stigmas longer, pale purple. Outer valve of the male corollet larger, acute, green; inner a little less, ovate, acute, whitish; anthers purple; seed in the hermaphrodite floret inclosed in the valves, which are hardened, yellow, and shining. It is distinguished by the spikelets being much larger than in any of the species. Native of Jamaica, in mountain woods, in the southern parts.—Sw.

15. PALLENS. PALE.

Panicle compound, ovate; branches clustered, erect; spikelets ovate, subulate; culm sub-divided, jointed; leaves ovate-lanceolate; sheaths ciliate on the neck and at the edge.

Culm from one to two feet high, round, leafy, sub-divided at the joints, grooved, striated; knots larger, approximating, brown; leaves oblique at the base, acuminate, slightly keeled, entire, longitudinally striated, smooth; sheaths rather large, often ventricose, striated. Peduncles from the upper sheaths, filiform, long, very loose; branches of the panicle clustered in form of a thyse; spikelets pedicelled, approximating, erect, pale green, smaller; inner valve of the calyx ovate-lanceolate, acuminate; outer three times smaller, ovate, acute. Valves of the corolla in the hermaphrodite florets minute, ovate, shining, whitish, hardish, one a little less, the other included; filaments very minute, anthers purple; style bifid, stigmas purple; seed oblong, whitish, shining. In the male or neuter floret, the valves of the corolla almost equal, lanceolate; outer greener; inner more tender, involved in the outer. Native of Jamaica among other grass in woods.—Sw.

16. LANATUM. WOOLLY.

Panicle compound, erect, smooth; spikelets ovate; culm branched; leaves ovate-lanceolate, pubescent; sheaths lanuginose, hirsute.

Culm a fathom in height at most, round, pubescent; branches divaricating, leafy, hirsute; leaves acuminate, half a foot long, spreading, striated, lanuginose-hirsute, soft; sheaths open in front, very hirsute; knots larger. Panicles half a foot long, with spreading, flexuose, smooth, branches; spikelets smooth, larger, remote, on capillary pedicels. Outer valve of the calyx less by half, ovate, obtuse, villose at top; inner larger, ovate, striated, concave, slightly keeled, villose at the top. Valves of the corolla in the hermaphrodite floret ovate, paler; anthers purple; seed inclosed by the yellow indurated valves of the corolla, ovate on one side, flat on the other. In the corolla of the male, or neuter floret, the outer valve is larger, concave, ovate, acute, smooth, keeled; inner flat, less, more tender.—Sw.

17. ARUNDINACEUM. REEDY.

Panicle compound, spreading; branches and branchlets stiff, capillary; spikelets roundish; culm sub-divided, jointed; leaves broad-lanceolate, acuminate, rigid.

Culm a fathom in height, erect, round, leafy, smooth. Leaves ovate at the base, erect, longitudinally nerved, striated, smooth; sheaths close, with the neck contracted and villose, striated, long; knots small, with a black ring. Panicle erect, dense, branched; branches and branchlets capillary, strict; spikelets small, numerous, pedicelled, pale green. Valves of the calyx almost equal, convex, ovate, striated, green; outer

outer ciliate at top, even when ripe, villose; the other smooth. Valves of the corolla in the hermaphrodite floret ovate, yellow, shining; anthers whitish; stigmas very minute, villose, whitish; seed white, shining; in the male, valves less, ovate, yellow, one less than the other; filaments two or three, with very minute anthers. Native of Jamaica in the high mountains near Coldspring, in St. Andrew's parish.—Sw.

18. GLUTINOSUM. GLUTINOUS.

Gramen miliaceum, sylvaticum, maximum, semine albo. Sloane, v. 1, p. 114, t. 71, f. 3. *Silvestris ramosa tenuis panicula laxa.*—Browne, p. 138.

Panicle compound, spreading; branches flexuose; spikelets pedicelled, distant, glutinous; culm erect, simple; leaves broader.

Culm three or four feet high, hollow, smooth, leafy; leaves broad-lanceolate, an inch in breadth, more than a foot in length, acuminate, erect, rounded at the base, hairy, ciliate at the edge, marked with lines, smooth, somewhat rugged underneath; sheaths long, close, smooth, contracted at the neck; ligule villose. Panicle almost a foot long, erect; branches in a sort of whorl, scattered, villose at the base, spreading, sub-divided, somewhat rigid; the last capillary; spikelets roundish, larger, shining, on flexuose capillary pedicels. Valves of the calyx equal, ovate, blunt, smooth, glutinous; valves of the corolla in the hermaphrodite floret smaller, whitish; filaments capillary, whitish; anthers purple; stigmas hairy, purple; seed roundish, hardish, white, shining. Outer valve of the corolla in the neuter floret, ovate, obtuse, smooth; inner smaller, and more tender. Native of Jamaica in the southern parts, in the woods of the highest mountains. It is called *ginger grass*, on account of the width of the leaves. The great clamminess of the spikelets, whence its trivial name, is peculiar to this species.—Sw. Browne calls it the large *millet reed*. He says it is common in the woods, rising by its slender branching stalks six or seven feet, and generally supported by neighbouring bushes: it is a hearty and agreeable fodder for all kinds of cattle.

19. TRICHOIDES. HAIR-LIKE.

Gramen miliaceum viride foliis latis brevibus, panicula capillacea, semine albo. Sloane, v. 1, p. 115, t. 72, f. 3. *Sylvaticus minor, panicula sparsa, foliis brevioribus lanceolato-ovatis.* Browne, p. 366.

Panicle very much branched, spreading; branches and branchlets sub-divided, capillary; culm declined, jointed; leaves ovate-lanceolate, very smooth.

Culm one or two feet high, sometimes rooting, sub-divided at the base, loose, round, smooth, leafy; knots approximating, smooth; leaves acute, rounded, and oblique at the base, entire, spreading, striated; sheaths close, longitudinally striated, ciliate; ligule open, hairy. Panicles erect, often from the bosom of the upper leaf, as from a spathe; branches in alternate clusters, multifariously sub-divided, spreading very much, so fine that the extreme ones are scarcely visible; spikelets distinct, pedicelled, very minute, oblong, green. Outer valve of the calyx very small; inner ovate, scarcely sharp, striated a little. Valves of the corolla, in the hermaphrodite floret, equal, ovate; anthers whitish; stigmas feathered, pale; seed oblong, shining, very minute. Outer valve of the corolla, in the male or neuter floret, ovate-acute; inner minute, white, flattish. This is Linneus' species *brevifolium*, *trichoides* is more des-

descriptive of the panicle in this species. Browne calls this smaller *wood-grass*, very common in the woods of Jamaica, agreeing with Guinea grass in the arrangement and formation of the flowers. The stalk and leaves are excellent fodder for all sorts of cattle, and the seeds feed the smaller sorts of birds.

20. DIVARICATUM. DIVARICATE.

Panicles short, awnless; culm very much branched, and extremely divaricating; pedicels two-flowered, one shorter.

See SCOTCH GRASS.

PAPAW TREE.

CARICA.

CL. 22, OR. 9.—*Dioecia decandria (polygamia.)* NAT. OR.—*Tricocca.*

GEN. CHAR.—Male calyx scarce manifest; it has, however, five very short sharp teeth; corolla monopetalous, funnel-form; tube slender, very long, gradually slenderer downwards; border five-parted, divisions lanceolate-linear, obtuse, obliquely and spirally revolute; the stamens are ten filaments, in the top of the tube of the corolla; the five alternate ones inferior; anthers oblong, fixed to the filaments on the inner side. The female, or rather hermaphrodite—calyx a very small five-toothed perianth, permanent; teeth ovate-acute, spreading; corolla five-parted, parts lanceolate, sharp, erect, below the middle, but reflected and twisted above; stamens ten filaments, five alternate, shorter, subulate, all united by a membrane at the base; anthers ovate, erect, two-valved, fertile; germ ovate, no style; stigmas three or five, broad, flat, expanding, multifid; segments very short, blunt; the pericarp a very large berry, angulated with three or five furrows, unilocular, fleshy; seeds numerous, ovate, green, very smooth, tunicated, nestling in the middle of the berry. There are two species, both natives of Jamaica.

I. PAPAYA. PAPAW.

Papaya major, flore et fructu majoribus pediculis curtis insidentibus.
Sloane, v. 2, p. 164. *Fronde cymosa, foliis peltato lobatis, lobis varie sinuatis.* Browne, p. 360.

Lobes of the leaves sinuated.

This tree rises with a thick soft herbaceous stem, to the height of eighteen or twenty feet, naked till within two or three feet of the top, and having marks of the fallen leaves most part of its length. The leaves come out on every side, upon very long footstalks. Those which are situated undermost are almost horizontal, but those on the top are erect; these leaves in full grown plants are very large, and divided into many lobes deeply sinuated. The stems of the plant, and also the footstalks of the leaves, are hollow. The flowers of the male plant are produced from between the leaves, on the upper part of the plant. They have footstalks near two feet long; at the end of which the flowers stand in loose clusters, each having a separate short footstalk: these are of a pure white, and have an agreeable odour: they are sometimes, but not often, succeeded

succeeded by small fruit.* The flowers of the female *papaya* also come out from between the leaves, towards the upper part of the plant, upon very short footstalks, sitting, close to the stem: they are large and bell shaped, composed of six petals, and are commonly yellow; when these fall away, the germen swells to a large fleshy fruit, of the size of a small melon. These fruits are of different forms: some angular, and compressed at both ends; others oval, or globular; and some pyramidal. The fruit, as well as the whole plant, abounds with a milky acrid juice, which is esteemed good for the ringworm; the stem and footstalks are hollow in the middle; and of so soft a substance that the stroke of an axe would cut through the body. The leaves are used by negroes for washing oznaburg clothes. The fruit, when ripe, has a pleasant juicy flavour, and frequently eaten like musk-melons, to which it is inferior in flavour, with pepper, sugar, and salt. In a green state they make a good pickle or preserve. It is easily propagated by seeds and layers, and almost grows wild in Jamaica. The seeds have a sharp biting taste, much like that of mustard, and are said to bring away worms in children. The tree lives but a few years, and never shoots into branches unless broken. Water impregnated with the milky juice makes all sorts of meat washed in it tender, but eight or ten minutes steeping will make it so soft that it will drop to pieces from the spit before it is roasted, or turn to rags in boiling. If the meat be rubbed with the juice, it is said to have the same effect, and for these purposes the juice of the wild papaw, the *prosoposa*, has been found much more powerful than the other. Mr. Anthony Robinson observes, that having one day eat heartily at dinner, he took as a desert, by way of curiosity, one of the wild papaws, and, in the space of an hour, the sensation of fullness was entirely gone, which he imputed to the quick digestion caused by the dissolvent nature of this fruit. He was informed that the Spaniards used the *papaya* as a cure for dry belly-ache, by eating the seeds and all the pulpy part, and supposed the cure was effected by its power in dissolving the thick viscous juice, which lines the inside of the bowels in that disorder.

The male and female trees may be propagated by layers. They grow wild in most parts of the island. The long mango papaw makes a pickle little inferior to the East India mango. The rounder fruit, when ripe, is boiled and eaten with any kind of flesh meat, and is looked upon as perfectly wholesome; but eaten raw it contains an acrid juice, very injurious to the intestines; and so penetrating is this fluid in the green unripe fruit, that, boiled with the hardest salt meat, it will render it perfectly soft and tender.† It is said to cause the like effect on hogs, who, if fed with it for any considerable time, are subject to have their guts excoriated with its acrimony.

The green fruit, thoroughly boiled, squeezed, and dulcified with a little sugar and lemon juice, is frequently used as a substitute for apples in sauce and tarts, and resembles them so exactly in taste as scarcely to be distinguished.

The negroes are possessed with an opinion of the good or bad qualities of particular trees, when planted near any habitation, as to the effects their neighbourhood may occasion to the inhabitants. This opinion seems to be well founded; for as trees, (especially in this climate) have a very extensive atmosphere, and diffuse a fragrant or disagreeable

* There have been instances of male and female flowers produced on one plant. Dr. Hill mentions having seen this in Lord Petres stove in England. Dr. Martyn notices that there is frequently small fruit on the male trees, and the seeds from the female fruit of trees, that had no male trees in the stove with them, grow as well as any other.

† To extract the corrosive juice they should be soaked for some time in salt and water.

greeable odour to a great distance around them, so it is highly probable, that these effluvia are impregnated with some of the more essential properties of the tree from which they are respired; and thus may have a consequence to health, similar to the breath of a diseased person, or the vapour of a perfumed substance. There may also be salutary or noxious qualities in the atmosphere of some, when the particles are so subtle as not to be distinguished by the olfactory sense. The smell of the manchioneel fruit has something in it which induces a sensation of faintness and languor. The scent emitted from the oppopanax wood, and roots fresh cut, is exquisitely cadaverous and loathsome. The secret agency of these effluvia of trees and plants may have a more powerful influence upon human health than many are aware of.

The negroes suppose that the papaw trees are very conducive to render the air healthy, and therefore plant them near their houses. The blossoms are extremely odoriferous, and the trunks so succulent, and growth so quick, that they possibly assist to drain the soil where they are planted of superfluous moisture. These properties, exclusive of any other, may serve to correct the air in certain situations. The full grown papaws, as well as the plantain trees, seem to be good natural conductors of lightning, from the redundancy of aqueous sap which they contain — *Long*.

2. PROSOPOSA. DWARF.

Papaya minor, flore et fructu minoribus pediculis curtis (et longis) insidentibus. Sloane, v. 2, p. 16c. *Sylvestris minor, lobis minus divisis, caule spinis inermibus opposito.* Browne, p. 300.

Lobes of the leaves entire.

This differs from the other, in being much smaller in every respect, seldom rising above four or five feet high, and growing wild in many parts of Jamaica. It likewise differs in having a branching stem, the lobes or divisions of the leaves entire, and the fruit being of a globose form, seldom more than three inches in diameter, and terminating in a small short prominence. It is marked at both ends with divers short deep furrows; its colour a pale yellow both within and without; the taste sweet, with a grateful bitterness intermixed. The seeds are rugged, and of a deep purple colour, in form like those of the common papaw, enveloped in a viscous juice, and inclosed in a thin transparent membrane, the pulpy part is very thin; they are endued with a pepperine taste; and the fruit has much the same qualities as the other.

PAPAW WEED—See BELLY-ACHE WEED.

PARROT GUM—See GUM TREE.

PARROT WEED—See CELANDINE.

PARROT WOOD—See CLOVEN BERRIES.

PARSLEY.

APIUM.

CL. 5, OR. 2.—*Pentandria digynia.* NAT. OR.—*Umbellatæ.*

GEN. CHAR.—Calyx—universal umbel of fewer rays; partial of more: corolla—universal ensiform; floscules almost all fertile; proper petals roundish; stamens simple filaments, with roundish anthers; pistil, germ inferior, styles reflex, stigmas obtuse; no pericarp; fruit ovate, striated, splitting in two; seeds two, ovate, striated

striated on one side, plane on the other. There are two species, natives of Europe, both of which have been introduced, and have thriven well in Jamaica.

I. PETROSELINUM. PARSLEY.

Stem-leaflets linear; involucels minute.

The stems of parsley or smallage are round, smooth, striated. Usually there is one leaflet at the origin of the universal umbel, and an involucre of six to eight folioles, fine almost as hairs, at the partial umbel. Flowers pale yellow, regular; petals small, long, narrow, acuminate, inflex; seed short, turgid. There are several varieties, but the curled is thought the best.

The roots and seeds of the *petroselinum* are used in medicine. The root of parsley is thought to be aperient, and, in this intention, is sometimes made an ingredient in apozems and diet-drink: if liberally used, it is apt to occasion flatulencies; and thus, by distending the viscera, producing a contrary effect to that intended by it: the taste of this root is somewhat sweetish, with a light degree of warmth and aromatic flavour. The seeds are warmer and more aromatic, and are an ingredient in the electuary of bayberries. The roots of smallage are also in the number of aperient roots, and have been sometimes prescribed as an ingredient in aperient apozems and diet-drinks, but are at present disregarded. The seeds of the plant are moderately aromatic, and were formerly used as carminatives; in which intention they are doubtless capable of doing service; though the other warm seeds, which the shops are furnished with, are preferred. Besides its medicinal virtues, parsley is reckoned an effectual cure for the rot in sheep, provided they are fed with it for two or three hours each time, twice a week. Hares and rabbits are very fond of this herb.

2. GRAVEOLENS. STRONG-SCENTED.

Celery has a smooth shining stem, deeply furrowed; leaves alternate, radical, pinnated, ternate; pinnae trifid, gash-serrate, shining, smooth; upper leaves ternate, sub-sessile. Umbel sub-sessile or peduncled, with about fifteen unequal rays at each axilla, supported by a trifid leaf: universal involucre often wanting: corollas small, white; seeds very small. This plant has much the same virtues as the other.

PASSION FLOWERS.

PASSIFLORA.

Cl. 20, OR. 4.—*Gynandria pentandria*. NAT. OR.—*Cucurbitaceæ*.

GEN. CHAR.—See Bull-Hoof, p. 123. The following species are indigenous to Jamaica, as well as those referred to under English names. Swartz classes this genus *monadelphica pentandria*.

With undivided leaves.

1. LAURIFOLIA. LAUREL-LEAVED.

Foliis ovatis, petiolis biglandulis, bacca molli ovata. Browne, p. 327.

Leaves ovate, quite entire; petioles biglandular; involucre toothed.

Stem suffrutescent, with very divaricating filiform branches; leaves a little emarginate at the base, nerved, and very smooth, on short petioles, compressed a little, having

having two glands under the base of the leaf; tendrils very long; peduncles the length of the petioles. The three leaflets of the involucre are roundish, concave, with blunt glandular toothlets about the edge, and pale; the five leaflets of the calyx are broad-lanceolate, slightly membranaceous at the edge, horned with a point or awn, smooth, variegated on the inside with blood-red dots. Petals five, the length of the calyx, narrower, acuminate, with blood-red dots scattered over them. Crown triple, the outer rays half the length of the petals; the middle longer than the petals, with toothed points; the inner shorter near the column, all variegated with red and violet: column cylindrical, straight; filaments variegated; germ yellow; styles variegated; stigmas bifid, black above; fruit ovate, watery.—Sw. Browne calls this *honey-suckle*, cultivated in many parts of America for the sake of its fruit; it climbs and spreads like the granadilla, and is made into arbours. The fruit is very delicate, and much esteemed; it is about the size of a hen's egg, full of a very agreeable gelatinous pulp, in which the seeds are lodged.

2. ANGUSTIFOLIA. NARROW-LEAVED.

Leaves sub-cordate, lanceolate, entire; petioles biglandular; flowers solitary.

The following have two-lobed leaves..

3. RUBRA. RED.

Leaves cordate; lobes acuminate, sub-tomentose underneath; stem villose.

Stem herbaceous, twining, round, grooved, hirsute, red; lobes of the leaves entire, nerved, somewhat hispid, soft; petioles round, red, villose without glands; tendrils sub-axillary. Flowers alternate, nodding, on solitary one-flowered peduncles; calyx ovate at the base; leaflets membranaceous at the edge, white within, green without, villose; petals whitish, or pale flesh colour; crown triple; outer rays the length of the petals, multifid, pale red; middle one-leafed, very short, plaited; inner a fleshy white rim; germ small, villose, green; fruit spherical, marked with six lines, scarlet when ripe, hirsute; pulp whitish; seeds black, tubercled, shining, covered with a pulpy aril.—Sw.

4. PERFOLIATA. PERFOLIATE.

Flos passionis perfoliatus sive periclymeni perfoliati folio. Sloane, v. 1, p. 230, t. 142, f. 3, 4. *Foliis trilobis; cruribus oblongis obtusis, intermedio fere obsoleto et setula terminato.* Browne, P. 10, p. 328.

Leaves oblong, transverse, embracing, petioled, dotted underneath; crown simple, many-parted.

Stem herbaceous, climbing and twining, three-cornered, sub-divided, striated, pubescent; leaves cordate-ovate, entire, besides the two lobes having a third between them extremely obscure, a very small bristle; they are nerved, smooth on both sides, glaucous underneath and pubescent; the younger ones very thin; at the base the leaves are lobate-cordate, embracing, with the lobes lying over each other, so that the stem is as it were perfoliate; lateral lobes emarginate, with a very short bristle; petioles very short, curved inwards, round, without glands; stipules awl-shaped, bent down, at the base of the petiole. Tendrils supra-axillary, very long; peduncles axillary, solitary, shorter than the leaves. Flowers middle-sized, scarlet; calyx bell-shaped, growing to the corolla; segments erect, linear, of the same colour with the corolla.

Corolla. Petals between the segments of the calyx, and double their length, lanceolate, from erect spreading. Nectary single, many-parted; segments erect, linear, fleshy, green, with blunt scarlet tips; column long; germ ovate; berry roundish.—Native of Jamaica in dry hedges near the coast, on the southern side of the island; flowering in the middle of summer.—*Sw.* Sloane says the footstalks are of a purplish colour; the leaves alternate; flowers purple. Browne calls it the larger passion flower with two-shanked leaves.

5. NORMALIS.

NORMAN.

Flos passionis, folii media lacinia quasi abscissa, flore minore, carneo.
Sloane, v. 1, p. 229. *Foliis trilobis; cruribus angustis oblongis, intermedio fere obsoleto.* Browne, p. 328.

Leaves emarginate at the base; lobes linear, blunt, divaricate, the middle one obsolete, mucronate.

This has slender angular stalks, rising twenty feet high, to which it fixes itself by its clavicles. The flowers and tendrils come out from the same joints. The leaves are of a pale green colour. The flower is red, and the stamens grow all on one side. This plant has been supposed to be the *coanenepilli* of Hernandez, but this seems doubtful as the figure in that author wants the intermediate lobe altogether. The fruit is oval, having six red lines upon it, containing black seeds, inclosed in a mucilaginous pulp.

6. LUNATA.

CRESCENT.

Leaves dotted, at the base slightly cordate, and having two glands; outer rays of the nectary club-shaped, compressed, obtuse.

Stems several, sometimes thirty feet high. Lobes of the leaves remote, elongated, entire, obtuse, terminated by a small bristle, similar to one placed between them in the middle of the leaf, each marked by a series of nectariferous dots between the larger veins. Petioles short, roundish, slightly downy, without glands. Tendrils axillary, simple, very long, smooth. Flowers axillary, two together, drooping; on peduncles twice as long as the petioles. Bractes three, small, setaceous, below the joint, at a little distance from each other. Corolla flattish at the base, deeply divided into ten segments, whitish and smooth; segments oblong, ovate, obtuse; the five outermost (calyx) thickest, externally green; the innermost (corolla) narrower and shorter.—External crown of the nectary consisting of about thirty yellow rays, a line shorter than the corolla; middle, of greenish capillary rays, much shorter; innermost a single, green, plaited, truncated, membrane, closely covering the cell where the honey juice is lodged; genitals as long as the corolla, smooth; column cylindrical, thickish, white; germ oval, slightly triangular.—*Smith.*

7. CAPSULARIS.

CAPSULAR-LIKE.

Leaves cordate, oblong, petioled.

Stalks slender, rising twenty feet when supported, and dividing into many weak branches. Leaves four inches long and three broad, ending in their points in two horns, in some more acute than in others, several of them appearing as if cut a little hollow at the top; they have three longitudinal veins, which join at the base of the leaf to the footstalk; but the two outer diverge towards the borders of the leaf in the middle, drawing in again at the top; they are of a deep green on the upper side, but

pale underneath, and stand on short footstalks. Peduncles very slender, an inch and a half long, purplish; flowers, when expanded, not more than an inch and a half in diameter, of a soft red colour, with little scent; fruit small, oval, when ripe purple.

The following have three-lobed leaves.

8. ROTUNDIFOLIA. ROUND-LEAFED.

Leaves roundish, three-lobed only at top, dotted underneath; nectary simple.

Stem suffrutescent at bottom, sub-divided, angular, grooved; leaves semi-ovate, three-nerved, veined, smooth on both sides, marked behind longitudinally with pellucid dots; lobes terminated by very small bristles, the middle one a little larger than the others; petioles short, without glands. Tendrils filiform, very long. Stipules two, opposite, awl-shaped. Peduncles axillary, filiform, an inch long; flowers nodding, pale-green, rather large. Calycine segments ovate, acute, erect, concave, forming a goblet at the base; petals semi-lanceolate, acute, erect, pale green; crown simple; the segments awl-shaped, erect, converging, having tawny glands at the tip; column longer than the corolla, round; filaments awl-shaped, dilated; germ roundish. Berry egg-shaped. It is distinguished from the other species by its rounded leaves, slightly three-lobed at top only. It grew in coppices in the southern parts of Jamaica, flowering at the beginning of the year.—Sw. Jacquin observes that the glandular dots on the lower side of the leaf are six or seven in a longitudinal row along the inner side of the two lateral nerves; that the stipules are acuminate, shining, embracing, and resembling bull's horns; that the peduncles are the same length with the leaves; that the flowers are middle-sized and void of scent; that there is a three-leaved involucre; the leaflets ovate, concave, small, firm, shining, smooth, yellowish, with a tinge of green; that the petals are white, and twice as long as the calyx; the nectary multifid and yellow; that the berry is roundish, small, and juiceless; and that in most of the leaves the middle lobe is scarcely to be observed. He says it is very common in the woods about Carthagena, in New Spain.

9. OBLONGATA. OBLONG.

Leaves elliptic, sub-trilobate in front, dotted underneath; lobes sharpish, the middle one shorter.—Sw.

10. LUTEA. YELLOW.

Flas passionis minor, folio in tres lacinias non serratas profundius diviso, flore luteo. Sloane, v 1, p. 230. *Foliis trinerviis nitidis, ad apices latioribus, subtrilobis; lobis æqualibus.* Browne, p. 328, f. 7.

Leaves cordate, smooth; lobes ovate; petioles without glands.

Root creeping, stems many, round, green, and tough, growing three or four feet. Leaves alternate, on short petioles, divided deeply into three sections, of a smooth dark-green shining colour. Peduncles from the axils of the leaves, slender, an inch long; flowers dirty yellow. It grows on rocky banks and sides of hills.

11. PARVIFLORA. SMALL-FLOWERED.

Leaves smooth; lobes ovate, entire, the middle one more produced; petioles biglandular; stem herbaceous.—Sw.

12. MINIMA.

12. MINIMA. DWARF.

Foliis nitidis trilobis, medio angusto longiori, lateralibus quandoque auritis, fructu baccato minori nitido. Browne, p. 328.

Leaves smooth; lobes lanceolate, quite entire, the middle one more produced; petioles biglandular; stem even, suberous at bottom.

Stem twining, simple, becoming corky at the base with age, round, smooth.— Leaves sub-peltate, sub-cordate; lateral lobes almost horizontal; all acute, nerved, smooth on both sides; petioles short, round, reflex, smooth; glands two, opposite, small, sessile, concave, brown, in the middle of the petioles. Stipules two, opposite, awl-shaped, by the side of the petioles; tendrils long, between the petioles. Peduncles axillary, solitary, longer than the petioles, loose, one-flowered; flowers small, whitish; calyx none, except the flattish base of the corolla; petals five, lanceolate, reflex at the tips; nectary fourfold; inmost a membranaceous rim, entire, brown at the base of the column; inner one-leafed, plaited, crenate, dusky purple; outer ciliated, with capillary erect hairs, black, with yellow tips; outmost with cilia twice as long as the others, reflex, very dark purple, yellow from the middle to the tip; column longer than the corolla; germ roundish; berry small, blue, egg-shaped. It is nearly allied to the following species, *suberosa*, but differs in the lobes of the leaves being narrow and divaricated; the stem herbaceous, becoming like cork when old, and the flowers smaller.—Sw.

13. SUBEROSA. GNAWED.

Leaves sub-peltate; lobes ovate-entire; petioles biglandular; stem suberose.

This rises to the height of twenty feet by a weak stalk, which, as it grows old, has a thick fungous bark like that of the cork-tree, which cracks and splits. The smaller branches are covered with a smooth bark; leaves smooth, on very short petioles; the middle lobe much longer than the lateral ones, so that the whole leaf is halbert-shaped. The flowers are small, of a greenish yellow colour; fruit egg-shaped, dark purple when ripe.

14. INCARNATA. FLESH-COLOURED.

Foliis subhastatis, petiolis biglandulis, stylo longiori, fructu subhirsuto rubello. Browne, p. 328. P. 9.

Leaves serrate, equal; petioles biglandular.

Root perennial; stalks annual, slender, rising four or five feet high. At each joint one leaf, on a short footstalk, having mostly three oblong lobes, but the two sides are sometimes divided part of their length into two narrow segments, and thus becoming five-lobed; they are thin, of a light green, and slightly serrate. The flowers are produced from the joints of the stalk, at the footstalks of the leaves, on long slender peduncles, in succession as the stalks advance in height. Calycine leaflets oblong, blunt, pale-green; petals white, with a double circle of purple rays, the rays of the lower circle longest, the flowers have an agreeable scent, but are of short duration. Fruit as large as a middling apple, changing to a pale orange colour when ripe, inclosing many oblong, rough, seeds, lying in a sweetish pulp.

HORTUS JAMAICENSIS.

The following has multifold leaves.

15. CÆRULEA. BLUE.

Flos passionis major pentaphyllus. Sloane, v. 1, p. 229. *Folius quinquelobis profunde divisis, lobis oblongis.* Browne, p. 328.

Leaves palmate, quite entire.

This grows to a considerable height, rising, when properly supported, to the height of thirty or forty feet, having stems as thick as a man's arm, covered with a purplish bark, but not woody. The leaves are on half inch long petioles, at each joint, composed of five smooth entire lobes, the middle one the longest, almost four inches long and one broad in the middle, the others gradually shorter, and the two outer lobes are frequently divided on their outer side into two smaller ones. Their footstalks are near two inches long, and have two embracing stipules at their base; and from the same point issues a long tendril. The flowers come out at the same joint with the leaves, on peduncles almost three inches long. The outer cover or involucre is composed of three concave ovate leaves, of a paler green than the proper leaves of the plant, and are little more than half the length of the calyx; the leaflets of which are oblong, blunt, pale green; the petals are nearly of the same shape and size, and stand alternately between them. Column about an inch long; germ oval; styles purplish, near an inch long; rays of the crown in two circles; the inner, which is the shortest, inclines towards the column; the outer, which is near half the length of the petals, spreads open flat upon them, and is purple at bottom, but blue on the outside. The flowers have a faint scent, and continue but one day: fruit egg-shaped, the size and shape of the Mogul plum, and, when ripe, of the same yellow colour, inclosing a sweetish disagreeable pulp, in which are lodged oblong seeds,

See BULL-HOOF—GRANADILLA—LOVE IN A MIST—WATER LEMON.

PEA, ENGLISH.

PISUM.

CL. 17, OR. 4.—*Diadelphia decandria.* NAT. OR.—*Papilionaceæ.*

GEN. CHAR.—Calyx a one-leafed five-cleft perianth, two upper segments shorter; corolla papilionaceous; stamens diadelphous filaments; one simple, superior, flat-tish; nine awl-shaped below the middle, united into a cylinder; anthers roundish; the pistil has an oblong compressed germ; style ascending, triangular, above keeled, pubescent; stigma growing to the upper angle; pericarp a large, long, roundish, legume, one-celled, two-valved; seeds several, globular.

SATIVUM. CULTIVATED.

Petioles round; stipules rounded at bottom and crenate; peduncles many-flowered.

This well known and valuable plant has been long cultivated in Jamaica, in several of its varieties, where it thrives admirably well, even from seeds many times removed from those brought from a colder climate, if proper care has been taken to cultivate them, which is but seldom the case. In England the pease have been greatly improved by what is called *roguing*, a practice which would no doubt be of great service here: It is done by looking carefully over such as are designed for seeds at the time when they

they begin to flower, and to draw out all bad plants, to prevent their farina from impregnating with the good; to effect which this is always done before the flowers open. By thus diligently drawing out the bad, reserving those which come earliest to flower, pease have greatly been improved of late years.

These pease are usually sown in little trenches parallel to each other. When the plants come up, the earth should be drawn up to their shanks, and the ground kept entirely free from weeds; and, when the plants are grown eight or ten inches high, you should stick some brushwood into the ground close to the pease for them to ramp upon, which will support them from trailing upon the ground, which is very apt to rot the growing sorts of pease, especially in wet seasons; besides, by thus supporting them, the air can freely pass between them, which will preserve the blossoms from falling off before their time, and occasion them to bear much better than if permitted to lie upon the ground, and there will be room to pass between the rows to gather the pease when they are ripe. With proper attention they are raised in Jamaica of as sweet and high a flavour as any in England.

The following method of keeping green-pease, and French beans, is given in *Sonnini's Bibliothéque Physico-economique*. Into a middling-sized stew-pan, filled with young green-pease, put two or three table spoonfuls of sugar, and place the pan over a brisk charcoal fire. As soon as the pease begin to feel the heat, stir them twice or three times, and when they yield water, pour them out on a dish to drain. When drained, spread them out on paper in an airy room, out of the sun, and turn them frequently that they may dry the sooner. It is necessary for their keeping, that they should not retain any moisture, for if they do, they will soon grow mouldy. French-beans may be managed in the same way, and will thus keep till the next season, as well flavoured as when first gathered.

PEA, PIGEON—See PIGEON PEA.

PEAR-TREE—See AVOCADO PEAR.

PEAR-WITHE.

TANÆCIUM.

CL. 14. OR. 2.—*Didynamia angiospermia*. NAT. OR. —

GEN. CHAR.—Calyx a one-leaved perianth, tubular, truncate, quite entire; (sometimes lightly bidented or tri-dented, permanent); corolla one-petaled, long; tube cylindrical, widened above; border from erect spreading, five-cleft, almost equal; the two upper segments approximating, less divided, nearly upright, the three lower spreading, a little reflexed; stamens four almost equal filaments, shorter than the corolla, bending in under the back of the tube, with the rudiment of a fifth; anthers two-lobed; the pistil has a germ placed on a fleshy ring, roundish; style simple; stigma two lobed; the pericarp is a large berry, sub-pedicelled, globular, or oblong, two-celled; seeds numerous, oblong, angular, nestling. There are two species, both natives of Jamaica.

1. JAROBÁ.

Cucurbitifera arbor forte, rhamnifacie spinosa, foliis oblongis confertis

tim nascentibus. Sloane, v. 2, p. 173. *Scandens, foliis inferioribus pinnato-ternatis, superioribus geminatis clavicula interpositis.* Browne, p. 267.

Lower leaves ternate, upper geminate; tendrils interpetiolar, terminating; stem scandent.

This climbing plant is frequent in many parts of the island, but seems most common between St. Elizabeth's and Westmorland. It rises with great ease to the top of the tallest trees in the woods, and then spreads a great way over the limbs of the neighbouring trees, or bends again towards the ground. It is generally more luxuriant towards the top; and, as this part requires a greater support, nature has supplied it, in a peculiar manner, with tendrils; for the leaves, which are always three on every common footstalk, towards the root, are never more than two at the top; but the extremity of the common stalk, which generally holds the third leaf in the lower branches, shoots here into a long winding tendril, by which it holds and sticks to every twig or branch it meets.—*Browne.* It is called *pear-withe*, as the fruit, when it is ripe, has a sweetish bitter taste, and has some stoney seeds in it, like a pear.

2. PARASITICUM. PARASITICAL.

Crescentia? 5.—*Scandens, sarmentis crassioribus, foliis majoribus ovatis nitidis oppositis.* Browne, p. 266.

Leaves ovate, coriaceous; stem scandent, shrubby, rooting.

This weakly plant sustains itself generally by the help of the neighbouring trees, or is found spreading upon the ground, where it does not meet with support. Its stem is moderately thick, and stretches frequently about seven or eight feet from the root.—The leaves are thick, oval, and shining, and the fruit round and smooth. It is found about Port-Antonio, near the Cascade in St. Ann's, and in many parts of the mountains, especially between Sixteen-Mile-Walk and Luidas.—*Browne.* The flowers are of a very deep purple colour, and arise in a binate order from the axæ of the leaves, which fade where they grow; these leaves are large and thick. It flourishes in February and March. The stem is as thick as a man's arm, and emits roots in the manner of ivy; it climbs rocks and trees to the height of fifty or sixty feet. The leaves are a little bitterish in taste.

PELICAN FLOWER, OR POISON HOGWEED. ARISTOLOCHIA.

CL. 20, OR. 5.—*Gynandria hexandria.* NAT. OR.—*Sarmentaceæ.*

GEN. CHAR.—*See Contrayerva, p. 231.*

GRANDIFLORA. GREAT-FLOWERED.

Scandens, foliis amplioribus cordatis; florum flabellis maximis variegatis, in appendicem longam tenuemque desinentibus. Browne, p. 329.

Leaves broad-cordate; stem twining, sub-herbaceous; peduncles solitary; lip of the corolla very large, with a very long tail.

The

The large climbing birthwort, with variegated flowers, or the poisoned hogmeat, is very common in St. Ann's, and bears very large flowers, the opening of which continues glued up longitudinally for a considerable time.—*Browne.*

This plant propagates itself by slender jointed stems, which are round, smooth, and hardly thicker than a goose quill. From the joints are protruded many long slender fibres, penetrating the earth in a perpendicular direction; from them likewise are produced many climbing stems of the same size, on which the large cordated leaves are placed alternately. The flowers are produced from the wings of the leaves singly, depending by short peduncles, which terminate in small concave orate involucre, from the centre of which the germens arise, penetrating through the involucre, where it joins the peduncles; the germ is subulated, slender, and hexagonal, indented with six furrows. The flower is of a very singular structure, and ought to constitute a new genus, at least it has as much right to do so, and more, than the *ipomœa* has to be separated from *convolvulus*. The flower is not less remarkable for its extraordinary size than its abominable scent, which it diffuses all around. The tube is nearly nine inches in length, recurved or bent back, so that the upper part leans upon the base, which is three inches and three-quarters in length, and its greatest breadth one inch and five-eighths. Its form is oblong, compressed on the sides, ventricose, gibbous behind, concave before, pentagonal, narrowing toward the ends, with five carinated angles in ribs, from which arise many reticulated veins, which, with the angles, are commonly purple. The middle part of the tube is two inches and a half in length; it is much narrower than the base, concave, and flattened on its upper part, but gibbous and convex on the outside, coloured and ribbed like the base, but less eminent.—These two parts being separated by cutting, there is seen opening into the base a short compressed tube, whose margins are erecto-patent and fimbriated, it takes its rise from a septum or partition, which separates or divides the base from the middle part. The upper part of the tube, which forms the rictus or awn, is ventricose, much wider than the rest of the tube, of a sub-ovate depressed form, its greatest length being equal to the middle part, but on the opposite side much shorter; it terminates in a broad margin or border, forming an ovate aperture. The limb is patent, concave, cordated, terminating in a very long appendix or tail; it is supported and decorated by twenty large nerves or rays, eminent on the outside, and terminating in as many denticles in the margin: the length of the limb, the tail included, is twenty inches, and its breadth above six. The limb is elegantly variegated with white and purple on the inside; the space of the ribs is distinguished by white or yellow streaks, and the intermediate spaces somewhat like irregular asterisks of purple, in a white or yellow ground. These flowers differ very much in the deepness and paleness of their colouring, and also in the mode of variegation, so that no two flowers can be found alike. The inside of the tube is hairy more or less in all its parts, but the base most so. There are six yellow anthers adhering to the style. The pods are about three inches long and one broad, and differ not in any respect from the rest of this genus. All the parts of this plant are abominably foetid, and detested and shunned by most animals. When hogs venture to eat them, through necessity, they are said to be destroyed by them; yet it is said, that the leaves and flowers, bruised and applied to parts afflicted with great pain, affords much relief.

See CONTRAYERVA.

PENGUIN.

PENGUIN.

BROMELIA.

Cl. 6, OR. 1.—*Hexandria monogynia*. NAT. OR.—*Coronarie*.

This was so named in memory of Olaus Bromel, a Swede, author of some botanical works.

GEN. CHAR.—Calyx a three-cornered small perianth, superior, permanent; divisions three, ovate; corolla three petals, narrow-lanceolate, erect, longer than the calyx: nectary fastened to each petal above the base, converging; stamens six subulate filaments, shorter than the corolla, inserted into the receptacle; anthers erect, sagittate; the pistil has an inferior germ; a simple filiform style, the length of the stamens; stigma obtuse, trifid; pericarp a roundish berry, umbilicate, one or three-celled; seeds numerous, incumbent, somewhat oblong, obtuse.

1. PENGUIN.

Caraguata-acanga. Sloane, v. 1, p. 248. *Caule assurgenti, racemo terminali, fructibus sejunctis*. Browne, p. 193.

Leaves ciliate-spiny, mucronate; raceme terminal.

This plant is very common in Jamaica, and grows wild in savannas and rocky hills. The leaves are very thick about the root, and from the centre springs the stalk, which generally rises to the height of twelve or sixteen inches above the foliage, and divides into a number of little lateral branches, bearing so many single flowers, which are exquisitely beautiful, being composed of red, blue, and purple, colours, variously intermingled, and surrounded with glossy leaves of scarlet, orange, and green, with some mixture of white; which colours fade gradually away as the fruit ripens, which is described as follows by the accurate Gærtner: "It is an inferior berry, of an ovate pyramidal shape, obscurely three-cornered, covered with rind, which is rugged, thick, suberose-fleshy, with raised confluent dots, producing three membranaceous partitions, on the inside, which meet at the axils; flesh pulpy, membranaceous, of a pale watery colour, and divided into several partial cells; no receptacle, but the seeds nestle in their proper cells, directing their navels towards the axis of the berry; they are of an ovate globular form, swelling lenticular, narrower at the navel, having a small brown tubercle at the top, smooth, shining, of a ferruginous chesnut colour." The fruit is about the size of a walnut, and of a yellow colour when ripe. The pulp has an agreeable sweetness, joined with so sharp an acid, that if it remains long in the mouth it will make the palate and gums bleed. A small quantity of this juice in water makes an admirable cooling draught in fevers: a tea spoonful, corrected with sugar or honey, destroys worms in children, cleanses and heals the thrush, and other ulcerations in the mouth and throat, and is extremely diuretic. In large doses it brings down the catamenia, and causes abortion. As a diuretic, it may be mixed with Rhenish wine. It also makes good vinegar and wine. This plant is commonly used for making fences, its leaves being very formidable to cattle, by the thick arched prickles on their edges. These leaves, stripped of their pulp, soaked in water, and beaten with a wooden mallet, yield a strong silky thread, which makes good ropes; and, from its fineness, is generally used for making lashes to whips: It is also manufactured into hammocks,

hammocks, and has also been made into good linen cloth. Were due attention paid to such valuable objects in Jamaica, the fibres of penguin might be obtained in great abundance from the most barren lands.

2. BRACTEATA. BRACTED.

Leaves serrate, spiny; bractes ovate-lanceolate; scape elongated; raceme compressed; racemules sub-divided; flowers peduncled.

This species was found in Jamaica by Swartz. The bractes are membranaceous, very entire, scarlet.

See PINE APPLE—SILK GRASS.

PENNY-ROYAL—See MINT.

PENNYWORTH, WATER.

HYDROCOTYLE.

CL. 5, OR. 2.—*Pentandria monogynia*. NAT. OR.—*Umbellatæ*.

This generic name is derived from two Greek words signifying water and a cup, because it grows in water, with hollow leaves containing water.

GEN. CHAR.—Calyx—umbel simple, involucre commonly four-leaved, small; perianth scarcely any; universal corolla uniform in figure not in situation; florets all fertile; proper corolla five-petaled; petals ovate, acute, spreading, entire; stamens five filaments, awl-shaped, shorter than the corolla, with very small anthers; the pistil has an upright compressed germ, orbicular, inferior, and peltate; styles two, awl-shaped, very short; stigmas simple; there is no pericarp; fruit orbiculate, compressed, transversely bipartite; seeds two, semi-orbiculate, compressed. Two species are indigenous to Jamaica.

1. UMBELLATA. UMBELLED.

Cotyledon aquatica. Sloane, v. 1, p. 212. *Foliis orbiculatis peltatis crenatis, umbellis multifloris*. Browne, p. 185.

Roots filiform, capillary, branched, whitish; leaves radical, peltate, orbiculate, crenate-gashed, smooth, veined, on smooth round petioles, from two to five inches, and often, in watery places, a foot long. Peduncles also radical, the length of the petioles, round; flowers in umbels, hermaphrodite; involucre scaly, with ovate minute leaflets; umbel simple, pedicels numerous, erect, one-flowered; corolla acute, reflex, white; styles contiguous at the base, the length of the petals; fruit roundish, compressed, striated.—Sw. It grows in most marshes and standing waters in Jamaica; the root is reckoned aperitive and deobstruent, but, as Browne observes, the umbelliferous plants are deservedly suspected, and seldom used. It is called *sheep's bane* and *white-rot*, because it kills sheep who eat it. Barham calls it *navel-wort*, and says "It hath a small round root, under the surface of the earth; at the joints are a great many small hairy blackish fibres, by which the plant is nourished; and from the same places are sent up the leaves and flowers, upon pretty long foot-stalks. The leaves are round, thick, sinuated on the edges, smooth, above an inch diameter, and very green, the foot-stalk entering in their very centre. The flowers stand close together round their foot-stalks."

foot-stalk's end; they are many, joined together, and of a greenish colour. The seeds are broad like parsnip-seed. The plant is sharp to the taste, and has been taken by some planters for scurvy-grass; the whole plant is of hot and subtle parts, pleasant and aromatic to the taste: They open obstructions of the liver and reins, for which no remedy is more proper; the juice of the green leaves is a famous antidote against poison; and the native Brasilians procure vomiting with it. It is used to take away the spots which the Portuguese call *os figados*, which are liver-spots; and it is said to kill sheep, if they feed upon it."

2. ASIATICA. ASIATIC.

Humilior, foliis semi-ellipticis crenatis, scapo florifero partiali brevi nudo. Browne, p. 185.

Leaves kidney-form, tooth-letted.

Browne says this is found in the mountains between Sixteen-Mile-Walk and St. Mary's, and calls it *mountain pennyworth*. The leaves have toothlets or notches equal round them; they are of a thick substance, and somewhat hoary, several together at each joint of the stalk.

PEPPER-ELDER.

PIPER.

CL. 2, OR. 3 — *Diandria trigynia*. NAT. OR. — *Piperitæ*.

GEN. CHAR. — See Colt's-Foot, p. 228. Of this twenty-five species have been discovered in Jamaica; besides those described under the name *colt's-foot*.

1. AMALAGO.

Piper longum arboreum altius, folio nervoso minore, spica graciliori et breviori. Sloane, v. 1, p. 134, t. 87, f. 1. *Frutescens diffusum ramis flexilibus geniculatis, foliis ovatis quinque nerviis, ad petiolum leniter revolutis.* Browne, p. 121.

Leaves cordate, commonly seven-nerved, veined.

This is a shrub from three to ten feet in height; stem even; branches dichotomous, jointed, sub-divided, round, brownish-green; leaves alternate, acuminate, not oblique, nerved and veined, very thin, bright green, smooth, paler underneath; petioles round, smooth. Joints swelling; spikes peduncled, opposite to the leaves, filiform, loose, many-flowered. Flowers clustered; no calyx, corolla, or filament; anthers from two to four, at the base of the germ, cordate-ovate, sessile, two-celled; germ ovate; style none; stigmas three, oblong sessile; berry sessile, containing a single seed, double the size of hemp-seed, black when ripe, of a taste slightly pungent.—Sw. It generally shoots out several stems, rising fifteen feet high, with crooked branches; both stem and stalks are hollow and pithy. The leaves are rough, about three inches long, and one and a half broad. The spikes are at the ends of the branches, slender, three inches long.

This plant grows very common in most of the hilly parts of the island, and looks very bushy and spreading, on account of its slender flexile branches. It begins to divide very

very near the root, and rises in tufts, thriving in cool shady places, and in a mixed clayey soil. The seeds and other parts of the fructification grow in the same manner with those of the black pepper, in the East Indies, from which they differ only in size; for the grains of this seldom exceed a large mustard seed in dimension, but the taste and flavour is in every respect the same. I have had a large quantity of this plant gathered for me, and have generally used it for many months, but never could perceive any sensible difference between it and that of the East, whether used in cookery or seasoning. To gather any quantity of this aromatic, it must be picked when full grown, and before it ripens; for, like pimenta, it grows soft and succulent by maturity, and emits the pungent flavour that recommends it while in the full grown state: it may be then dried in the sun, like pimenta, and left adhering to the natural spikes, which have the same flavour and pungency with the grain itself, and are as easily ground in the mill. The leaves and tender shoots of this plant are frequently used in discutient baths and fomentations, and sometimes pounded and applied with success to foul ulcers; the root is warm, and may be successfully administered as a resolute, sudorific, or diaphoretic; but it must answer best in a diluted state, such as in infusions or light decoctions; which, however, may be varied in degrees of strength, as occasion requires. I do not know of any deobstruent of this nature that answers better in dropsies, or lighter obstructions from a lentor or inertion.—*Browne*.

As a cure for ulcers, the following observations on this plant are by an anonymous writer in the *Columbian Magazine*, for the year 1798: "Take the leaves and boil them; when boiled, beat them into a salve, which spread on one of the leaves as you would a plaster on a bit of rag; but remember first to clean well the ulcer; the water that the leaves were boiled in will answer as a bath for that purpose; then lay on your poultice; continuing the bathing and dressing daily, and a perfect cure will be effected in a short time: He also states that he knew a negro in Spanish Town, whose face, neck, breast, and shoulders, were much ulcerated, and the large orifices of the ulcers were filled up with the above described poultice; and that he saw her in about twelve months after with the ulcers perfectly healed, and a fine child in her arms; when she said the cure was entirely effected by this poultice. The same writer observes that the stem and leaves are made use of by the negroes as a substitute for black pepper, and indeed, when dried and beaten fine, it has a delightful flavour, resembling very much that of the black pepper; the bark of the tree is hotter than the leaves. The root boiled into a decoction is excellent for rheumatic complaints; and will give ease in the gout."

The leaves and fruit are also said to be good for the belly-ache; and the bath of them excellent in all sorts of swellings: the decoction of the root, leaves, and fruit, is considered as a good stomachic. The wood is made use of to strike fire, by turning a hard piece of wood, pointed, rapidly in a hole made in it.

2. ADUNCUM. HOOKED.

Piper longum folio nervoso pallide viridi, humilius. Sloane, v. 1, p. 135, t. 87, f. 2. *Frutescens diffusum flexile, foliis ovatis venis plurimis oblique arcuatis refertis.* Browne, p. 122.

Leaves oblong-ovate, acuminate, unequal at the base, veined; spikes solitary, axillary, uncinat.

Stems several, shrubby, round, knobbed at the joints; smooth, an inch and more in thickness, branched, ash-coloured, upright, eight feet high; branchlets green, the thickness

thickness of a quill, spreading very much. Leaves alternate, on short petioles, in a double row, a little shorter at the inner base, deep green above, rugged backwards, rough-haired when examined by a glass; underneath pale green, villose but not rugged, quite entire, netted with numerous veins, many-nerved, if the principal veins be considered as nerves; they are about half a foot in length, and have little taste or smell. Stipule lanceolate, acute, converging, smooth, striated, caducous. Peduncles alternate, opposite to a leaf, solitary, erect, round, somewhat villose, half an inch long. Spikes solitary, slender, yellowish, two or three inches in length, towards the origin of the branches bowed, so closely covered with minute fructifications, that it is scarcely possible to detect their structure even with a microscope.—*Jacquin*. Sloane observes that the stems are hollow; that the leaves have scarcely any footstalks; that the spikes have an aromatic biting taste, are about four inches long, and resemble a rat's tail, being generally crooked. He calls it *Spanish elder*. It is frequent in the lowlands of Jamaica. Piso says the root is aromatic, and in taste, colour, and smell, resembles ginger, and, when fresh, not inferior to it. He recommends the decoction and fomentation of the leaves and roots for colics, and pains of the limbs.

3. ROTUNDIFOLIUM. ROUND-LEAVED.

Piper longum minimum, herbaceum, scandens, rotundifolium.—Sloane, v. 1, p. 137. Saururus 6.—*Minimum repens foliis orbiculatis tumentibus*. Browne, p. 204.

Herbaceous, leaves roundish, flat, fleshy; stem filiform, creeping.

Stems herbaceous, very long, sub-divided, round, succulent, throwing out short capillary fibres on all sides from the stems. Leaves petioled; the lower orbiculate, entire, small, smooth, somewhat succulent, pubescent at the edge, with red spots below; the upper or terminating ones somewhat oblong, smooth on both sides; spikes terminating, shortly peduncled, round, solitary, small.—*Sw*. This plant grows in close moist woods, covering the mossy trunks of trees, and stones covered with moss; into which penetrate the fibrils produced at its joints, at every one of which grows a leaf on inch long red pedicels. The spikes have brown spots on them, and the whole plant is succulent.

4. DISTACHYON. TWIN-SPIKED.

Piper longum humilius fructu e summitate caulis prodeunte. Sloane, v. 1, p. 136. *Repens foliis crassis subrotundis glabris, spicis terminalibus*. Browne, p. 204.

Leaves ovate-acuminate; spikes conjugate; stem rooting.

Stem from two to three feet high, climbing, sub-divided, compressed a little, smooth, marked with rufous spots, succulent. Leaves entire, very smooth, not fleshy, three-nerved, paler underneath; petioles very long, inserted by little sheaths into the stem. Peduncles terminating or axillary, two-parted; spikes upright, linear; stamens and pistils inserted spirally into the spike.—*Sw*. It is a native of rocky grounds in the mountains, and described as follows by Barham: "This has a creeping jointed root; the stalks are round and green, jointed, rising seldom above a foot high; the leaves are thick, succulent, smooth, and of a dark green colour, having some visible veins on the upper surface like those of the water-plantain, and sometimes notched at the upper end of the leaf. At the top of the stalk comes out a slender four-inch spike
julus,

jutus, or *ligula*, like those of *ophioglossum*, or some of the long peppers, of a sweet smell, and sharp to the taste like them. and withal somewhat balsamic; the plant rubbed smells very gratefully. It is hot in the fourth degree, and dry in the third. It strengthens the heart, heats the stomach, and gives a sweet breath; attenuates gross and thick humours; resists poison, the iliac passion, and cholic; is diuretic; helps the *catamenia* or menses in women, helps birth, expels the dead child, opens obstructions, and cures pains from cold; it takes away the cold fit of an ague."

5. VERTICILLATUM. VERTICILLATED.

Saururus 8.—*Erectus minor, foliis orbiculatis verticillatis tumentibus, spicis terminalibus.* Browne, p. 204.

Leaves in whorls, four together, elliptic, blunt, three-nerved.

Browne calls it the smaller erect *saururus*, with round verticillated leaves. It is upright, about a finger's length, tender; leaves three, four, or five, together, succulent, quite entire, petioled; spikes simple, several times longer than the leaves.

6. MACROPHYLLUM.

Frutescens minus, foliis amplioribus nitidis ovatis ad basem inequaliter porrectis, spica longiori equali. Browne, p. 122.

Leaves elliptic-ovate, acuminate, smooth, unequal at the base, veined; petioles appendicled; spikes axillary, solitary.

This is a large shrub, two fathoms in height; stem round, striated; branches almost erect, smooth; leaves alternate, large, bluntly acuminate, oblique at the base, having ten or twelve nerves transversely oblique, quite entire. Petioles short, broadish, channelled, membranaceous with a leafy margin, appendicled at the base of the leaf; spikes pedicelled, long, erect, opposite to the leaves; flowers very close, not distinct. Filaments four to six, very short, or else the anthers sessile, twin, round the germ; styles none; stigmas three, sessile. The stem and branches are less brittle than in the other species. It grows in shady places, on rocky or gravelly hills.

7. VERRUCOSUM. WARTED.

Piper longum arboreum foliis latissimis. Sloane, v. 1, p. 135, t. 88, f. 1.

Arborescent, leaves oblong-acuminate, obliquely many-nerved, veined, smooth; coriaceous; stem and branches warted.

This is a tree, the trunk of which is from fifteen to twenty feet in height, upright, with the bark much warted; branches simple, terminating, leafy, round, with white warts; leaves ovate, acuminate, blunt, alternate, veined, the margin rolled in; the largest from one to two feet in length; petioles short, channelled, with the margins at the base of the leaf membranaceous, warted. Spikes pedicelled, half a foot long, opposite to the leaf, upright; flowers in a spiral, the males and females in a manner distinct; germs between the upper and lower circuit of stamens; anthers two, ovate, placed obliquely; stigmas three, sessile. It is known by its habit, its warted stem and branches, and its large coriaceous leaves. Native of Jamaica, on calcareous rocks in the interior.—Sw.

8. QUADRIFOLIUM.

8. QUADRIFOLIUM. LEAVES IN FOURS.

Leaves in fours, wedge-form, ob-ovate, emarginate, sub-sessile; stem erect.

Stem half a foot high, herbaceous, sub-divided, stiff, even, thick. Leaves on short petioles, ob-cordate, a little concave, thickish, very smooth. Spikes terminating, peduncled, solitary, an inch long, round, whitish, thickish; peduncles short; flowers crowded; no calyx or corolla, only a scale; filaments two, very short; anthers globular, thin; germ ovate, no style, stigma oblique, villose. Native of lofty mountains.

Sw.

9. DISCOLOR. DISCOLOURED.

Leaves broad-ovate, five-nerved, very smooth, discoloured on the hinder part; spikes more lax, florets more remote.

This is a shrub, a fathom in height, with alternate, erect, sub-divided, jointed, round, smooth, branches. Leaves alternate, broad-cordate, or ovate, with a blunt joint, entire, thickish, veined, whitish, or very pale green, underneath, shining; two of the five nerves are marginal; joints swelling; petioles channelled, short.—Spikes pedicelled, solitary, opposite to the petiole, shorter than the leaves, slender. Peduncles longer than the petioles, round, smooth. There is no calyx, but an oblong scale, within which are two very short evanescent filaments, and two ob-ovate whitish anthers; germ oblong, within the scale; style short, thickish; stigmas three, small, acute; berry minute, oblongish. It is distinct from *amalago* in its wide very smooth leaves, looser spikes, and more remote flowers. Native of high mountains, flowering in autumn. It varies with leaves attenuated at the base, and blunt, ovate, oblique.

Sw.

10. GENICULATUM. JOINTED.

Leaves oblong-acuminate, oblique, many-nerved, smooth; stem and branches jointed.

A shrub two fathoms in height, or more; stem sub-divided towards the top, round, smooth; branches and branchlets long, rod-like, round, smooth, very brittle; joints swelling; leaves alternate, half a foot long and more, attenuated but blunt at the top, rounded and unequal at the base, entire; petioles short, channelled, smooth. Spikes solitary, opposite to the leaves, long, pedicelled; flowers spiral, as in *verrucosum*.—Stem, though often thick, yet so weak as to require support from other shrubs. It is distinguished from *macrophyllum*, which it resembles very much, by its jointed habit, brittleness, &c. from *verrucosum* by its joints, thinner leaves, and even stem and branches. Native of Jamaica, in stony woods.—Sw.

11. HISPIDUM. HISPID.

Leaves ovate-acuminate, oblique, hirsute, wrinkled; nerves alternate, veined; spikes erect.

This is a shrub a fathom in height, upright, round, hirsute, hispid; branches pappulous, flexuose, jointed, round, hirsute; joints hirsute and hispid. Leaves alternate, many-nerved, hirsute, hispid; nerves alternate, raised on the back of the leaf; petioles short, round, not channelled. Spikes pedicelled, opposite to the leaves, solitary, two inches long, cylindrical, thick, brown; peduncles thick, round, hispid, shorter than the petioles; flowers aggregate; no calyx; but small round ciliate scales, by the sides of which are two very short filaments; anthers extremely minute, roundish, twin;

4-twin; germ ovate; styles none; stigmas three, reflex, very small; berry sessile, roundish, very small. It differs from *scabrum* by its remarkable hirsute and hispid habit.—Sw. To avoid confounding this plant with the species *hispidulum*, Swartz changed the name from *hispidum*, which he first gave it, to *hirsutum*. It grows in the cooler mountains, and flowers in autumn.

12. NITIDUM. SHINING.

Leaves lanceolate-ovate, oblique at the base, smooth, shining.

This grows about five or six feet high, very much branched, with a smooth round trunk; branches and branchlets always jointed at the insertion of the leaves, brittle.—Leaves alternate, oblique at the base on the outerside, veined, dark green, from two to three inches long; petioles very short, round. Spikes peduncled, shortish, round, upright, very even, whitish. Peduncles opposite to the leaves, short; flowers very much crowded. Native of mountain woods, flowering in spring.—Sw.

13. ALPINUM. ALPINE.

Herbaceous, stem erect, nearly simple; leaves ovate, roundish, acute, veinless underneath; spikes axillary.

This is an herbaceous plant, with filiform, descending, simple roots; stem about a foot high, round, succulent, smooth. Leaves rather large, entire, nerved, smooth on both sides, paler underneath, thickish; petioles longish, compressed, smooth, widening at the base. Spikes solitary, the length of the leaves, round, thick, with the flowers close. No calyx, but lanceolate-acute scales; filaments two, very short, at the base of the pistil; anthers very small, whitish; germ oblong, acuminate; style simple; stigma acute. It is distinct from *obtusifolium*, which has a creeping stem: It grows on the highest mountains, and flowers in February and March.—Sw.

14. HISPIDULUM. SHAGGY.

Herbaceous, almost upright; leaves roundish, petioled, very thin, rough-haired above.

Herbaceous, small, and bright green; roots small, capillary, divided, whitish.—Stem two or three inches high, jointed, diffused, round, striated, smooth, pellucid, succulent, brittle; branchlets diffused, opposite to the leaves. Leaves alternate, emarginate at the base, entire, veined, green above, and somewhat hispid with pale pellucid bristles thinly scattered over them, dotted, beneath very smooth, paler, very tender; petioles short. Spikes minute, pedicelled, opposite to the leaves, solitary; flowers very minute, naked, distant; calyx none, but scales scarcely visible at the base of the germ; filaments two, by the side of the germ, at its base, very minute, patulous, horizontal, in a manner club-shaped; anthers roundish, whitish; germ oblong, hispid; style thick, short; stigma blunt, brown. Fruit pedicelled, the size of a small pin's head, roundish, black, somewhat hirsute-hispid. Its taste is bitter, but not aromatic. It grows in moist woods in the Blue Mountains, is an annual plant, and flowers in the spring.—Sw.

15. TENELLUM. TENDER.

Herbaceous, simple, decumbent; leaves distich, ovate, veinless, ciliate at the edge; spike ascending.

Root

Root small, annual, simple, filamentose; stem three or four inches high, very seldom divided, jointed, round, scarcely striated, somewhat hirsute, having very minute red dots on it, and a scattered shagginess among the petioles, grooved, brittle. Leaves small, on very short petioles, alternate, attenuated towards the top, blunt, entire, veinless, nerveless, bristly-ciliate on the upper surface towards the edge, somewhat succulent, smooth, pale underneath. Spike terminating, filiform, simple; flowers very minute; calyx none, but a roundish little scale covering the germ; by the sides of which are two filaments, the length of the germ, upright; anthers roundish, twin, white; germ oblong, attenuated at the base; style none; stigma villous, oblique; berry on a pedicel three times as long as the germ, containing one seed; when ripe it is the size of a small pin's head, of a blackish colour and aromatic flavour. Native of Jamaica in the cool mountains on trunks of trees, especially such as are rotten, hanging down among the moss, and flowering in summer.—Sw.

16. AMPLEXICAULE. STEM-EMBRACING.

Sub-herbaceous, leaves lanceolate-ovate, embracing, nerved, fleshy; stem erect, simple.

This is a sub-herbaceous plant; stem almost simple, a foot high, hardish, slightly flexuose, angular, compressed, grooved, smooth, rigid; leaves alternate, narrower below, blunt at the tip, quite entire, thickish, bright green. Peduncles sub-terminating, axillary, solitary, erect; on very long, nearly upright round spikes, sometimes conjugate; flowers very minute. It is easily distinguished by the leaves embracing the stem. Native of Jamaica on rotten trees, and among the remains of those which have fallen.—Sw.

17. GLABELLUM. SMOOTH.

Herbaceous, leaves ovate-acuminate; stem declined, rooting, very much branched.

Stems very long, crowded, procumbent or declining, rooting, leafy, roundish, even; leaves alternate, quite entire, flat, thickish, even; nerves five, distinct at the back of the leaf; petioles shortish, channelled, red at the base. Spikes filiform, nearly upright, sometimes hooked, terminating, or lateral, opposite to the petioles, peduncled, solitary or conjugate. The colour of the whole plant is pale green: it is nearly allied to *acuminatum*, but differs in having a weak stem, very much branched, somewhat creeping and rooting; the leaves ovate-acuminate, less, and not so thick; spikes smaller, shorter. The *P. scandens* of Swartz is a variety of this.

18. SERPENS. SERPENT.

Herbaceous, leaves roundish-acute, flat, discoloured; stem creeping.

Stem puts forth capillary fibres on every side, is filiform, sub-divided, angular, smooth, leafy; leaves alternate, roundish, but greater in width than length, retuse as it were at the base, blunt, with a very short point, half an inch in breadth, entire, flat, somewhat succulent, veinless, smooth on both sides, paler underneath; petioles shorter than the leaves, spreading, round, smooth. Spikes peduncled, round, half an inch in length, upright; peduncles axillary, longer than the leaves, round, smooth, solitary; flowers so minute as not to be distinguished by the naked eye, separated by ovate scales; filaments scarcely any; anthers two, by the side of the germ; germ ovate-acute; style none; stigmas three; fruit very minute, ovate-acute, sessile. It may

may be distinguished from *rotundifolium* by the leaves not being orbiculate or ovate, the stem not divaricate, but more simple and thicker; the leaves underneath paler and thicker, broad-ovate at the base, with a very short point. Native of rocky woods among moss.—Sw.

19. CORDIFOLIUM. HEART-LEAVED.

Herbaceous, leaves ob-cordate, petioled, plano-convex, fleshy; stem creeping.

Stem filiform, climbing, rooting, divaricate, round, succulent; leaves alternate, entire, smooth; petioles longish, reflex. Spikes on the lateral branches pedicelled, opposite to the leaves, filiform, an inch long, solitary; peduncles shorter than the spikes; flowers very minute, whitish. The whole plant has a sharp taste. It is very distinct from the others in the leaves, and grows in old woods on decaying trees.

20. MUMMULARIFOLIUM.

Herbaceous, leaves orbiculate, concavo-convex; stem filiform, creeping, rooting.

Stems two or three feet long, sub-divided, roundish, very smooth, soft; leaves petioled, alternate, small, shining, somewhat succulent, very minutely hairy on the entire margin. Spikes peduncled, terminating, short; peduncles scarcely longer than the leaves, upright; flowers hardly discernible, whitish. It resembles *rotundifolium*, but differs in having a filiform divaricating stem, and orbicular concavo-convex leaves. It grows on old trees.—Sw.

21. FILIFORME. FILIFORM.

Herbaceous, leaves linear, blunt, the uppermost in whorls; stem filiform, creeping.

Roots capillary, stem creeping far and wide, four-cornered, smooth, striated, and spotted; branches short, ascending, filiform, loose, nearly upright, four-sided, spotted, smooth; leaves small, the lower ones opposite, decussated, in fours at top, linear-oblong, entire, underneath paler and spotted with pale red, smooth on both sides; petioles shortish. Spikes terminating, peduncled; peduncles upright, solitary, terminating, the length of the leaves, round, smooth; calyx none, but a roundish scale; filaments two, very short, at the sides of the scale; anthers twin; germ oblong, covered with the scale; style none; stigma villose; berry oblong, minute. Native of Jamaica among moss at the roots of trees, on the high mountains.—Sw.

22. STELLATUM. STARRY.

Leaves in whorls three, four, or five, together, oblong, acuminate, three-nerved.

This is an herbaceous plant, a foot high, or more; root simple, filamentose, whitish; stem round, leafy, pubescent, sometimes ferruginous. Leaves four or five on a petiole, entire, smooth, paler underneath, scarcely succulent; the upper leaves are commonly three, the lower four, seldom five. Spikes terminating, long, four or five, conjugate, filiform, loose; flowers very minute, green; no calyx, but an ovate smooth scale covering the germ; at the base of which are two very short filaments; anthers roundish, twin; germ ovate; no style; stigma oblique, villose; berry sessile, oblong.—Sw.

23. RETICULATUM. NETTED.

Leaves cordate, seven-nerved, netted.

This is a shrub a fathom in height and more; stem round, upright, smooth; branches somewhat jointed. Leaves alternate, large, cordate-rounded, acuminate, nine-nerved, smooth; petioles smooth, striated, sheathing. Spikes long, peduncled, opposite to the leaves, round, upright; peduncles shorter than the petioles; stamens and pistils inserted spirally into the spike; filaments scarcely any; anthers two, sub-sessile, opening transversely at the top; germs under the anthers; styles three, thickish; stigma blunt.—Sw.

24. PULCHELLUM. BEAUTIFUL.

Leaves in fours, sub-sessile, oblong, nerveless, quite entire; stem round, spikes terminating.

This species is said to have been found in Jamaica by Thomas Clark, M.D.

25. SCABRUM. RUGGED.

Leaves broad-ovate, acuminate, oblique, wrinkled, rugged; spikes erect.

This is a shrub five or six feet high; stem upright, round, somewhat rugged; branches spreading, rugged. Leaves alternate, many-nerved, veined; nerves rigid, on the lower surface more raised; petioles short, round. Peduncles opposite to the leaves, shorter than the petioles, thick, round, rugged, solitary. Spikes two inches long, cylindrical; flowers crowded; calyx none, but a minute roundish scale, at the sides of which are two very short filaments; anthers very minute, roundish, twin; germ ovate; styles none; stigmas three, recurved, permanent. It differs from *aduncum*, which it resembles very much, in having wider leaves, brownish green not paler, and upright not hooked spikes. Native of Jamaica in the mountains of the more temperate part.—Sw.

See COLT'S-FOOT.

PEPPER-GRASS.

LEPIDIUM.

CL. 15, OR. 1.—*Tetradynamia siliculosa*. NAT. OR.—*Siliquosæ*.

This generic name is derived from a Greek word signifying a scale.

GEN. CHAR.—Calyx a four-leaved perianth, leaflets ovate, concave, deciduous; corolla four-petaled, cross-shaped; petals ob-ovate, twice the length of the calyx, with narrow claws; stamens six awl-shaped filaments, length of the calyx, the two opposite ones shorter; anthers simple; the pistil has a heart-shaped germ, a simple style, the length of the stamens, and an obtuse stigma; the pericarp a heart-shaped silicle, emarginate, compressed, sharp on the margin, two-celled; valves navicular, keeled, opposite the lanceolate dissepiment; seeds some, ovate-acuminate, narrower at the base, nodding. One species is a native of Jamaica; the *sativum*, or garden cress, has also been introduced.

1. VIRGINICUM. VIRGINIAN.

Iberis humilior annua Virginiana ramosior. Sloane, v. 1, p. 195, t. 123, f. 3. *Erectum ramosum, foliis inferioribus oblongis pinatifide lobatis, superioribus angustis serratis*. Browne, p. 272.

Flowers—

Flowers with three or four (only two) stamens and four petals; stem leaves lanceolate-lancear, serrate, pinnatifid, lower ones pinnate.

Root annual, single, fibrous, white. Root-leaves an inch in length, half of them being footstalk, and reddish, with three or four deep jags, at the beginning oval, half an inch broad, indented about the edges, smooth, dark green. Stem round, whitish green, a foot and a half high, having longer, narrower, deeper cut, leaves, set thick about it without any order; the branches also come out frequently on all sides, and round their ends flowers, small, white, four-petaled, on peduncles the eighth part of an inch in length. Silicle round, emarginate, containing one oblong reddish seed in each cell.—*Sloane*. It grows wild in most parts of Jamaica, spreading its branches in the form of umbrella supporters. Every part of the plant has a hot pleasant biting taste, like cress, and is equally good in sallads. Cattle and sheep are fond of this plant.

2. SATIVUM. COMMON.

Flowers tetradynamous; leaves oblong, multifid.

This is the common garden cress, so much used in sallads, which thrives well in Jamaica, and should be more attended to, as sheep are particularly fond of it, and it has been found to be a great preservative against that fatal disorder the rot; in wet seasons it has been found very beneficial to this valuable animal, as well as mint and pennyroyal. The famous Mr. Bakewell discovered that a certain cause of the rot in sheep was their feeding on grass which had been overflowed; a circumstance well worthy the attention of such as possess pens in low or swampy situations in this island. Perhaps the sowing of pepper grass and garden cress freely through such pastures, might counteract the bad qualities of the grass after wet seasons; or by cultivating these plants in some spot, to which the sheep may have ready access.

No English Name.

PERDICIUM.

CL. 19, OR. 2.—*Syngenesia polygamia superflua*. NAT. OR.—*Compositæ*.

GEN. CHAR.—Common calyx oblong, imbricate; compound corolla imbricate, rayed; corollets bilabiate; there is no pericarp, the calyx unchanged; seeds solitary, obovate; down capillary, sessile, very copious, the length of the calyx, fastigate; receptacle naked. One species is a native of Jamaica.

RADIALE. RADIATE.

Frutescens, foliis nitidis ovatis dentatisque, floribus comosis. Browne, p. 312, t. 33, f. 1. *Trixis*.

Flowers sub-radiate, outer calyx four-leaved; stem shrubby.

This plant agrees with this genus in its bilabiate capsules, but differs in its whole habit. Browne calls it the shrubby *trixis*, a little shrub very common in the sayannas about Kingston, seldom rising above four or five feet. The common receptacles are disposed at the extremities of the branches, and the outer divisions of the flowers grow gradually smaller, and curl more downwards as they approach the centre, which gives the whole something the appearance of a radiated flower at the first appearance.

PERIWINKLE.

VINCA.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT. OR.—*Contortæ.*

This name is derived from *vinco*, to vanquish, as this plant, by creeping, subdues other plants.

GEN. CHAR.—Calyx a five-parted, erect, permanent, perianth; corolla one-petaled, salver-shaped; tube longer than the calyx, cylindric below, wider above, marked with five lines, the mouth a pentagon; border horizontal, five-parted; segments fastened to the apex of the tube, wider outwards, and obliquely truncate; the stamens five filaments, very short, inflexed and retroflexed; anthers membranaceous, obtuse, erect, curved in, fariniferous on both sides at the edge; the pistil has two roundish germs, with two roundish little bodies lying by their sides; style one, common to both, length of the stamens; stigma capitate, concave, placed on a flat ring; pericarp, two long, round, follicles, acuminate, erect, one-valved, opening longitudinally; seeds numerous, oblong, cylindric, grooved, naked.

ROSEA. ROSE.

Stem suffrutescent, erect; flowers in pairs, sessile; leaves ovate-oblong; petioles two-toothed at the base.

Stem upright, branching, three or four feet high, when young succulent, jointed, purple; but as the plant advances, the lower parts become woody. The branches have the joints very close, are covered with a smooth purple bark, and have oblong, ovate, entire, leaves, smooth, and succulent, sitting pretty close to the branches. Flowers axillary, solitary, on very short peduncles; tube long and slender; brim spreading open, flat, divided into five broad obtuse segments, reflexed at their points. The upper surface of the petal is of a bright crimson colour, and the under side pale flesh colour. There is also a white variety, both very ornamental plants. They were introduced from the East Indies, and thrive well in Jamaica. The red kind, indeed, may be found wild about the streets of Kingston and Spanish Town, and in many other parts of the island.

PETER'S WORT.

ASCYRUM.

CL. 18, OR. 4.—*Polyadelphia polyandria.* NAT. OR.—*Rotaceæ.*

This generic name is derived from a Greek word, signifying a soft plant.

GEN. CHAR.—Calyx a four-leaved perianth, the outer leaflets opposite, very minute, linear; the inner heart-shaped, large, flat, erect; all permanent; corolla four ovate petals; the outer opposite, very large, the inner less; stamens numerous filaments, bristle-shaped, slightly united at the base in four parts; anthers roundish; the pistil has an oblong germ; style scarcely any; stigma simple; the pericarp an oblong capsule, acuminate, one-celled, two-valved, inclosed in the larger leaves of the calyx; seeds numerous, small, roundish, fixed to the edge of the valves. One species is a native of Jamaica.

HYPERICOIDES.

HYPERICOIDES. HYPERICUM-LIKE.

Fruticosum minus, supra-decompositum; ramulis gracilibus marginatis; foliis linearibus, sessilibus, basi biglandulis. Browne, p. 309.

Leaves oblong; branches ancipital.

This is an elegant little shrub, common in the cooler mountains of New Liguanea, rising about three feet, very full of leaves and branches. The filaments do not seem to be joined at the bottom.—*Browne*. The branches are dichotomous, the twigs compressed and ancipital. Leaves opposite, sub-sessile, lanceolate, obtuse, entire, very finely perforated, smooth; at their base are very small glands. Flowers terminating, peduncled, solitary, yellow; two leaflets of the calyx are four times as big as the two others, and inclose them; they are heart-shaped, blunt, and smooth; corolla cruciform; petals the size of the larger leaves of the calyx, spreading; filaments distinct, upright, surrounding the germ, the length of the petals; germ oblong, sharp, compressed; styles two, very short; stigmas blunt. Capsule compressed, covered with the shrivelled calyx.—*Sw.*

PETESIA—See RONDELETIA.

No English Name.

PHYLLANTHUS.

CL. 21, OR. 3.—*Monoecia triandria.* NAT. OR.—*Tricoccæ.*

This generic name is derived from two Greek words signifying leaf and a flower, the flower growing out of the leaf.

GEN. CHAR.—Male calyx six-parted, bell-shaped; no corolla; filaments three, anthers twin. Female calyx as in the male; no corolla; nectary a rim of twelve angles, surrounding the germ; the pistil has a roundish germ, three bifid styles, and blunt stigmas; the pericarp a roundish capsule, three-grooved, three-celled; cells bivalve; seeds solitary, roundish. One species is a native of Jamaica.

NUTANS. NODDING.

Ricini fructu glabro, arbor, julifera, lactescens folio myrtino.—Sloane, v. 2, p. 7, t. 158, f. 2.

Shrubby, leaves alternate, oval, glaucous underneath; racemes terminating, leafy, nodding.

This has gray coloured small roots, which send up a trunk the bigness of a man's leg, twenty feet high, covered with a gray bark on the outside, on the inside red and milky. The twigs after rain abound in flowers, after which follow leaves, two inches long and one broad, of a dark green shining colour. The twigs have here and there a small green triangular fruit, on short pedicels, which afterwards enlarges, and contains three roundish seeds in three cells.—*Sloane*.

See SEA-SIDE LAUREL.

PHYSIC.

PHYSIC-NUT.

JATROPHA.

CL. 21, OR. 9.—*Monoecia monadelphia.*NAT. OR.—*Tricoccæ.*

GEN. CHAR.—See Cassada, p. 161.

1. CURCAS.

Ricinus, ficus folio, flore pentapetala viridi, fructu levi pendulo.—Sloane, v. 1, p. 127. *Assurgens, ficus folio, flore herbaceo.*—

Browne, p. 348.

Leaves cordate, angular.

Stem from seven to eight feet high, suffrutescent, round, smooth, and branched; leaves five-angled, the angles at the base rounded, the rest acute; flowers in terminating cymes; peduncles alternate, upright, many-flowered; flowers almost aggregate, on very short pedicels. Males copious; females sessile, fewer, solitary in the middle of the cyme. In the males the calyx is five-leaved, with ovate convex leaflets; corolla five-parted to the base, pale yellow; filaments ten to fourteen, connected from the base to the middle; anthers oblong, upright; glands five, at the base of the filaments. The females have the calyx and corolla as in the male; the latter green and larger; germ roundish, bluntly three-cornered; style three-parted above the middle, with bifid tips; stigmas blunt.—*Sw.* Capsule oblong, obtusely three-cornered, large, when ripe wrinkled and rugged on the outside; the rind thick and coriaceous; the three grains or cells papery, whitish, two-valved; receptacle central, columnar, slender, thickened at top into a flattened fungous head; seeds solitary, large, ovate-oblong, convex on one side, on the other very obscurely angular, insomuch that they are almost cylindric, produced at the tip into a hollow dagger point, on which there is a white fungous umbilicus; they are black with minute chinks, and rough to the touch.

X —*Gartner.* The physic-nut tree is very common in all the sugar colonies, but dies after a few years. The leaves are much used in resolute baths and fomentations, and the seeds sometimes as a purgative; but they operate very violently, and are therefore but little used.—*Browne.* The nuts contain an almond-like kernel, divided into two parts, between which lie two milk-white thin membranaceous leaves, easily separable from each other, and are perfect in every part, having the stalk middle rib and veins very visible. Grainger says the Spaniards name these nuts *avellanos*, or purgatives. By roasting they are supposed to lose part of their virulency, and this is also destroyed by taking out the little leaves between the lobes, but this Hughes says is an error. In sweetness and agreeableness of flavour these nuts exceed an almond, but three or four of them will operate briskly both up and down; and the oil prepared from them, in the same manner as from the oil nut, is recommended in dropsy; the dose a table-spoonful. A decoction of the leaves, Dr. Wright informs us, is often used with advantage in spasmodic belly-ache, attended with vomiting, sits easier on the stomach than any thing else, and seldom fails to bring on a discharge by stool. The leaves, pounded and boiled in hogs-lard, applied warm on hard swellings, are a good resolvent. The following remarkable case, which shews the great virtues of the juice of this plant, has been communicated to the compiler by a gentleman of great respectability (Oliver Hering, Esq.) of the parish of Westmorland:

“I was attacked by the piles, I believe in consequence of taking aloes with calomel, and suffered for several weeks incredible torments. The sphincter and rectum were violently

violently swelled and indurated, the latter apparent for some inches upwards, and there was a considerable discharge of pus. My medical friends apprehended that I had a fistula, and were considering of the usual operation, but gave me some time to decide on submitting to it. In this interval I used an ointment made of the milk of the physic-nut shrub, mixed with half its quantity of melted hogs-lard, and applied inwardly as far as it could be pressed. In five days all the swelling and induration were reduced, and in a week I was perfectly free from pain. This remedy was told by an old Coromantee woman to her mistress, who is my neighbour, and by her communicated to me. It is very astringent, and gives an ugly stain to linen. I have since heard that this juice, which is acquired by cutting or breaking the branch of the shrub, is commonly used by negroes in dispelling tumours. In mercy to sufferers in the same way this ought to be published."

2. MULTIFIDA. MULTIFIDA.

Assurgens, foliis digitatis, laciniis angustis pinnatifidis. Browne, p 348.

Leaves many-parted, even; stipules bristle-shaped, multifid.

This grows generally to the height of five, six, or seven feet, with a very smooth suffrutescent stem, and spreading branches. Stipules bristle-shaped, multifid, at the base of the branches and petioles. Leaves alternate, sub peltate, multifid; the divisions pinnate, with the odd leaf longer, smooth, but whitish underneath. Peduncles terminating, very long, round, thick, very smooth, sub-divided; pedicels coloured, in corymbs; flowers small, red. Males very numerous; females solitary, sub-sessile; in the former the calyx five-cleft, coloured; petals five; ovate-entire; nectary five-parted, surrounding the stamens; filaments eight, red, united at the base; anthers ovate, yellow: In the latter the calyx is five-parted, coloured; corolla five-petaled, petals ovate, red; germ three-cornered, green; styles three, shorter, red, bifid at top; stigmas blunt; capsule large, oblong, growing yellow as it ripens; seeds solitary, round.—Sw. This plant is now very common, and, having been first introduced into the French islands from the continent, is known by the name of *French physic-nut*. From its bunches of beautiful red flowers it is a very ornamental plant. The seeds are purgative, but operate so violently that it is dangerous to make use of them; though formerly the Spaniards administered scarcely any other medicine. The whole plant, Swartz observes, distils a tenacious watery liquor.

Physic-Nuts.—Some call them *tyle-berries* of India. They purge strongly upwards and downwards, given from three to five; they may be candied over, and given unknown to nice palates; if the inward film be taken out, they will work more gently.—The best way of preparing them is, first to torrify them; then take off the outward skin and inward film, that is, the sprout or *punctum saliens*; then bruise them in a mortar, and steep them in Madeira wine; and they will purge well all gross humours. They afford great quantities of oil, which may be got by boiling or expression, and which purges strongly; this oil they use or burn in their lamps in Brasil. If you rub the stomach with the oil, it will purge and kill worms; it cures the itch, and deterges ulcers. There are three or four sorts of these trees; but one, in particular, differs very much from the rest, whose leaves are more divided, and have a very beautiful scarlet.

scarlet flower: These never grow so high as the other sorts; they are called *French physic-nuts*, and their purging quality is more strong than any of the other sorts.—*Barham*, p. 141.

3. DIVARICATA. DIVARICATE.

Leaves ovate-acuminate, entire, very smooth; racemes divaricating. *Sw. Pr.* p. 98.

This species of *jatropha* was found in Jamaica by Swartz.

See CASSADA.

PICKERING'S-HERB—See CHRISTMAS PRIDE.

PIGEON OR ANGOLA PEA.

CYTISTUS.

CL. 17, OR. 4.—*Diadelphia decandria*. NAT. OR.—*Papilionaceæ*.

GEN. CHAR.—Calyx a one-leafed, two-lipped, perianth; upper lip two-cleft, lower three-toothed; corolla papilionaceous; stamens diadelphous filaments, with simple anthers; the pistil has an oblong germ, a simple style, and obtuse stigma; the pericarp an oblong legume, attenuated at the base, stiff; seeds few, kidney-form, compressed. One species is a native of Jamaica.

CAJAN.

Laburnum humilium, *siliqua inter-grana et grana juncta*, *semine esculento*. Sloane, v. 2, p. 31. *Fruticosus, erectus, ramosus, triphyllus; foliis sub-cinereis oblongis; vexillo variegato; siliqua compressa, ad semina torosa*. Browne, p. 296.

Racemes axillary, erect; leaflets sub-lanceolate, tomentose, the middle one on a larger petiole.

This rises with a weak shrubby stalk eight or ten feet high, sending out many side branches, which grow nearly erect; the leaves are alternate, always three together, dark green above, paler below, very soft to the touch. The flowers come out from the side of the branches, single or in clusters, of a deep yellow colour; calyx sub-pubescent; standard erect; wings horizontally flat; keel blunt; stamens truly diadelphous; legumes hairy, clammy, about three inches long, sickle-shaped, ending in a long sharp point, swelling where each seed is lodged; seeds roundish, a little inclined to kidney-shape. The pigeon pea is so called on account of pigeons being fond of them; it is a very hardy plant, and thrives in the poorest soil. When young, and properly cooked, it is very little inferior, as a green, to English peas; and, when old, is an excellent ingredient in soups. The leaves are very good fodder for cattle, hogs, and horses. It is a perennial plant, bearing when about a year old, and lasts from five to seven years in good soil, whence it has derived the name of *seven-year-pea*. They have generally blossoms, green and dry fruit, upon them at the same time, and continue in bearing for several months of the year, about Christmas; and therefore sometimes called in Jamaica the *Christmas pea*. Dried they keep for a considerable time,
and

and are a very wholesome pulse. Barham observes that the juice of the leaves, or distilled water from them, makes an excellent eyewater.

A small variety of this species has been introduced into the botanic garden, Liguanea, by Mr. Wiles; as also two other exotic species of this genus, the *laburnum* and *capitatus*.

PIGEON-WOOD.

GUETTARDA.

CL. 21, OR. 6.—*Monoecia hexandria*. NAT. OR.—*Tricoccæ*.

So named by Linneus in honour of J. E. Guettard, member of the Academy of Sciences at Paris, and author of a book on plants, 1747.

GEN. CHAR.—Calyx a one-leafed cylindric perianth; corolla one-petaled, funnel-shaped: male stamens four to six filaments, with linear anthers; the pistil a filiform style. Female pistil has a roundish inferior germ, a filiform style, and sub-ovate stigma; the pericarp a dry drupe; seed a lobed nut. Two species are natives of Jamaica.

1. SPECIOSA. BEAUTIFUL.

Arbor, forte prunifera, folio subrotundo glabro, venis purpureis.—Sloane, v. 2, p. 131, t. 221, f. 2. *Arborescens, foliis subrotundis subtus argenteis; spicis florum bigeminis, sustentaculis longis alaribus insidentibus.* Browne, p. 205, t. 20, f. 1.

Leaves sub-cordate, ovate, obtuse with a point, silky underneath; flowers with six or seven stamens.

This tree has the habit of *hernandia*. The leaves are very large, naked, quite entire, with alternate veins; the petioles are much shorter than the leaves, and compressed. The peduncle is opposite to the petiole, but on the upper branches there are two opposite peduncles; they all terminate in a very short dichotomous cyme.—The male flowers are sessile, alternate, from the upper side only of the cyme; calyxes somewhat tomentose, scarcely apparently two-lobed; tube of the corolla tomentose; lobes of the border oval oblong, one-third only the length of the tube; no germ; style shorter by half than the tube; stigma cylindric-headed, obtuse. The female flowers are like the males, but have a germ succeeded by a drupe, containing six large woody seeds, connected together.—*Linneus*. This small tree grows plentifully in Sixteen-Mile-Walk, and may be always seen in the small wood behind the church; the bark is smooth, and the leaves large and roundish; it seldom rises above eight or ten feet in height, or exceeds three or four inches in diameter, and the disposition of the flowers is very remarkable, as well as the texture and form of the leaves. I have not seen any of the fruit in a perfect state.—*Browne*. Dr. Browne named this plant *halesia*, after the Rev. Dr. Hales, author of the Vegetable Statics. The fruit of this plant is a moist drupe, unilocular, and of an obscure purple colour, when ripe; it encloses a ligneous quadrilocular nut, containing one seed in each cell, and is ripe in October and November. The tree is known by the name of *pigeon-wood*, and is said to be a very hard wood, beautifully grained. In the young plants the leaves are purplish

purplish above and more so beneath, their veins finely tinged with the same colour.—
A. Robinson. There is another *pigeon-wood*, better known by that name, and noticed
 in the following article, whose genus is perhaps still undetermined.

2. ELLIPTICA. ELLIPTIC.

Leaves elliptic, pubescent; flowers with four stamens.—*Sw.*

PIGEON OR ZEBRA WOOD.

Genus Unknown.

CL. 5, OR. 1.—*Pentandria monogynia.*

GEN. CHAR.—Calyx a perianth, very small, monophyllous, campanulate, quinquefid,
 pregnant with the germ, and permanent; corolla monopetalous and funnel-
 shaped; the tube slender, pentagonal, and four times the length of the cup; the
 limb is quinquefid, the lacinia linear, channelled or furrowed on their inside, re-
 volute, and one-third longer than the tube; there are five small glands, one
 placed at each divarication of the laciniae; the stamina consist of five equal decli-
 nated filaments, arising from the base of the tube, equalling the laciniae in length;
 anthers very long, slender, and vermiform; the style is filiform, undulated, and
 equal in length to the corolla; the fruit is an oblong ovate capsule, bivalved, and
 splitting open from the top to the base, coronated with the laciniae of the cup;
 the seeds are many, small, round, compressed, and decorated with a foliaceous
 margin.

*Foliis ob-ovato oblongis, spicillis alaribus; ligno durissimo, ex sub-
 luteo et fusco variegato.* Browne, p. 368.

Browne places this tree among those whose characters he had not been able to obtain.
 It is a shrubby tree, generally found in the mountains, rising sixteen or eighteen feet
 high, but seldom exceeds four inches in diameter. The wood is hard, of a close even
 grain, bears a good polish, and is beautifully striped and clouded. It is used by car-
 penters for fineering.

PIMENTA.

MYRTUS.—

CL. 12, OR. 1.—*Icosandria monogynia.* NAT. OR.—*Hesperide.*

GEN. CHAR.—See Bayberry, p. 75.

PIMENTA.

Myrtus arborea aromatica foliis laurinis. Sloane, v. 2, p. 76, t. 191,
 f. 1. *Foliis oblongo ovatis, racemis terminalibus et lateralibus.*—
 Browne, p. 247.

Flowers trichotomous-panicled; leaves oblong-lanceolate.

The pimenta, pimento, Jamaica pepper, or allspice-tree, grows about thirty feet
 in height and two in circumference; the branches near the top are much divided and
 thickly beset with leaves, which, by their continual verdure, always gives the tree a
 beautiful

beautiful appearance; the bark is very smooth externally, and of a grey colour; the leaves vary in shape and in size, but are commonly about four inches long, veined, pointed, elliptical, and of a deep shining green colour; the flowers are produced in bunches or panicles, and stand upon subdividing or trichotomous stalks, which usually terminate the branches; the calyx is cut into four roundish segments; the petals are also four, white, small, reflex, oval, and placed opposite to each other between the segments of the calyx; the filaments are numerous, longer than the petals, spreading, of a greenish white colour, and rise from the calyx and upper part of the germen; the antheræ are roundish, and of a pale yellow colour; the style is smooth, simple, and erect; the stigma is obtuse; the germen becomes a round succulent berry, containing two kidney-shaped flattish seeds. This tree is a native of Spain and the West India islands. It flowers in June, July, and August.

The pimenta trees grow spontaneously, and in great abundance, in many parts of Jamaica, but more particularly on hilly situations near the sea, on the northern side of that island; where they form the most delicious groves that can possibly be imagined; filling the air with fragrance, and giving reality, though in a very distant part of the globe, to our great poet's description of those balmy gales, which convey to the delighted voyager

“Sabæan odours from the spicy shore

“Of Araby the blest.—

“Chear'd with the grateful smell, old Ocean smiles.”

This tree is purely a child of nature, and seems to mock all the labours of man, in his endeavours to extend or improve its growth; not one attempt in fifty to propagate the young plants, or to raise them from the seeds, in parts of the country where it is not found growing spontaneously, having succeeded.* The usual method of forming a new pimenta plantation (in Jamaica it is called a walk) is nothing more than to appropriate a piece of woodland, in the neighbourhood of a plantation already existing, or in a country where the scattered trees are found in a native state, the woods of which being fallen, the trees are suffered to remain on the ground, till they become rotten and perish. In the course of twelve months after the first season, abundance of young pimenta plants will be found growing vigorously in all parts of the land, being, without doubt, produced from ripe berries scattered there by the birds, while the fallen trees, &c. afford them both shelter and shade. At the end of two years, it will be proper to give the land a thorough cleansing, leaving such only of the pimenta trees as have a good appearance, which will then soon form such groves as those I have described, and, except perhaps for the first four or five years, require very little attention afterwards.†

Soon after the trees are in blossom, the berries become fit for gathering, the fruit not being suffered to ripen on the tree, as the pulp in that state, being moist and
I 2
glutinous,

* Birds eagerly devour the ripe seeds, and, muting them, propagate these trees in all parts of the woods. It is thought that the seeds passing through them undergo some fermentation, which fits them better for vegetation than those gathered immediately from the tree. Long says he believes this to be the fact, for the ripe berries will take with more certainty after being laid together some days to sweat. Miller mentions a circumstance of their being kept in a heap for two years, and, having fermented, grew in great abundance with the first rains after they were sown.

† It seems particularly fond of a white marly or chalky soil, having a shallow surface of mould, and of the rocky lands, which can scarcely be put to any other use; but it requires refreshing showers in its infant state, and therefore is trained with difficulty in the most southern hills near the coast.

glutinous, is difficult to cure, and, when dry, becomes black and tasteless. It is impossible, however, to prevent some of the ripe berries from mixing with the rest; but, if the proportion of them be great, the price of the commodity is considerably injured.

It is gathered by the hand; *—one labourer on the tree, employed in gathering the small branches, will give employment to three below (who are generally women and children) in picking the berries; and an industrious picker will fill a bag of seventy pounds a day. It is then spread on a terrace, and exposed to the sun for about seven days, in the course of which it loses its green colour, and becomes of a reddish brown, and when perfectly dry it is fit for market.

The returns from a pimenta walk in a favourable season are prodigious. A single tree has been known to yield one hundred and fifty pounds of the raw fruit, or one hundred weight of the dried spice; there being commonly a loss in weight of one-third in curing; but this, like many other of the minor productions, is exceedingly uncertain, and perhaps a very plenteous crop occurs but once in five years. Its annual export from Jamaica (the only one of our colonies which produces pimenta) is about six thousand bags of one hundred and twelve pounds each.—*Edwards.*

Some of these trees are observed to bear no fruit, which has led several persons to conjecture that there are male and female trees; but Dr. Browne refutes this notion; asserts they are hermaphroditical, and supposes, that if those called males were lopped and broken like the rest, for one or two years, they would produce equally well.†

As there is so great an affinity between this and the true clove, it has been proposed as worthy of trial, if the fruit, when first formed, or the flowers picked off the tree, and dried, might not answer the same purpose as the Asiatic; at least it might answer as a good succedaneum for that spice, and deserves the experiment, as being the growth of our own colony.

A walk once formed is attended with little or no labour, or expence, till the time of gathering, and this is performed with very few hands; nor is the land useless for other purposes; for under the trees is generally good pasturage for cattle, horses, or sheep.

The more odoriferous and smaller the berries are, the better they are accounted at market. The leaves and bark are full of aromatic inflammable particles, for which reason the growers are extremely cautious not to suffer any fire to be made near the walks.

Pimenta is deservedly esteemed the most temperate, mild, and innocent, of all the common spices, and fit to come into more general use, instead of the eastern commodities of this kind, which it far surpasses, by promoting digestion, attenuating tough humours, moderately warming and fortifying the stomach, expelling wind, and doing other friendly offices to the bowels. A decoction of the leaves, used by way of fomentation, has relieved in rheumatic aches and pains of the bones.—*Long.*

Pimenta berries are chiefly imported into Britain from Jamaica; whence the name
Jamaica

* By twisting off the small twigs containing bunches of the fruit, which is afterwards beaten off, when the leaves coil a little, by small sticks. The berries are thought sufficiently dry when the seeds in them rattle.

† Browne says he could never observe a distinct male or female flower on any of them. Swartz asserts it is polygamous, having barren and fertile flowers, either together or on a distinct tree, that the calyx, which is called the fruit, or is inferior, is present in most of the species, but by no means suffices to form a distinct genus, rather performing the office of a bracte; and that the berry is commonly one-seeded, though it sometimes appears to be three-seeded.

Jamaica pepper. It is also called *all-spice*, from its taste and flavour being supposed to resemble those of many different spices mixed together. This spice, which was first exported for dietetic uses, has been long employed in the shops as a succedaneum to the more costly oriental aromatics: it is moderately warm, of an agreeable flavour, somewhat resembling that of a mixture of cloves, cinnamon, and nutmegs. Distilled with water it yields an elegant essential oil, so ponderous as to sink in the water, in taste moderately pungent, in smell and flavour approaching to the oil of cloves and nutmegs. To rectified spirit it imparts, by maceration or digestion, the whole of its virtue; in distillation it gives over very little to this menstruum, nearly all its active matter remaining concentrated in the inspissated extract. Pimenta can scarcely be considered as a medicine; it is, however, an agreeable aromatic, and, on this account, is not unfrequently employed with different drugs, requiring such a grateful adjunct. Both the Pharmacopœias direct an aqueous and spirituous distillation to be made from these berries, and the Edinburgh Collège order also the *oleum essentielle piperis Jamaicensis*.

See BAYBERRY—MYRTLE—SILVER-TREE.

PIMPERNELL—See BROOMWEED and DWARF PIMPERNELL.
PINDARS—See GROUND-NUTS.

PINE-APPLE.

BROMELIA.

CL. 6, OR. 1.—*Hexandria monogynia*.

NAT. OR.—*Coronaria*.

GEN. CHAR.—See Penguin, vol. 2, p. 48.

ANANA.

Leaves ciliate-spiny, mucronate; spike comose.

This is an herbaceous plant, with leaves somewhat resembling those of the aloe, but not so thick or succulent, for the most part serrate on their edges, and armed with prickles. The fruit resembles in shape the cone of some species of the pine-tree, whence the name has been derived. There are several varieties of this well known, elegant, and delicious fruit; all of which thrive well in Jamaica. Some of these have been obtained from seeds, which, it is thought, if sown more frequently, would produce still more varieties. The principal known are—1, queen pine; 2, sugar-loaf; 3, king; 4, smooth; 5, green; 6, black Antigua or Ripley; 7, Granada; 8, bog-walk; 9, smooth long narrow-leaved; 10, Montserrat; 11, Surinam: but it is impossible to enumerate all, as new varieties may arise every day. They are all propagated by planting the crowns or suckers, which latter come more quickly to maturity, and are therefore generally preferred. The suckers or crown should be left to dry for a few days; the crowns especially, for if planted before the bottom is hard and healed over, they are apt to rot: if the suckers be drawn carefully, they will have a hard skin over the lower part, and need not lie so long; they should be divested of their lower leaves so high as to allow depth for their planting, but should be thoroughly dried and healed before put in the ground, as they often perish by rotting when this is not observed.

The

The pine thrives best in a brick mould and warm situation. Some persons cultivate them on the top of small ridges or banks, raised about eighteen inches, and disposed in straight rows; they grow most luxuriantly when they are thus associated together, like the penguin, and the suckers from them are stronger and finer than when the plants are separated at a distance from each other, and their roots are likewise kept cooler and moister. They are subject, especially in a very dry season, to be attacked with a small white insect, which, if not destroyed, will overspread the leaves quite to the root, stop the growth of the plants, and consume their juice. This is suspected to be the same which frequently does such mischief, in long droughts, to the cane-pieces, and is called the blast. In order to kill them, it has been recommended to steep the fresh leaves and stems of tobacco, for twelve hours in water, and sprinkle all the plants every day with this water, by means of the common garden pot, till the insects disappear; the water so impregnated is said to kill these animalcules, without doing the smallest injury to the plants. Some use a sponge; but this is too laborious and dilatory a method, where the plants are numerous, and all or most of them affected.—Perhaps a strong decoction of the tobacco leaves, used when perfectly cool, might be found still more effectual; the experiment might likewise be practised on cane-pieces, by means of a water engine, with a rose head fixed on the discharging pipe.

The fermented juice of the sweeter sorts of pine has been made into a very pleasant wine, and is sometimes mixed in the cisterns that contain the liquor for rum, in order to communicate a more agreeable zest. They are a profitable commodity in this island, either for sale in the towns, or to the shipping; and some of the fruit is exported by way of present, preserved in syrup, as they form a very elegant appearance, with their crowns, at a desert.—*Long, p. 793.*

Dr. Wright says pines have a detersive quality, and are better fitted to cleanse the mouth and gums than any gargle whatever.

See PENGUIN and SILK GRASS.

PITCAIRNIA—See SCARLET PITCAIRNIA.

PLANTAIN, ENGLISH.

PLANTAGO.

CL. 4, OR. 1.—*Tetrandria monogynia.* NAT. OR.—*Plantagines.*

GEN. CHAR.—Calyx a four-cleft perianth, erect, very short, permanent; corolla one-petaled, permanent, border four-cleft, reflex; stamens four long capillary filaments, with oblong anthers; the pistil has an ovate germ, a filiform style, and simple stigmas; the pericarp an ovate two-celled capsule, cut transversely; seeds several or solitary, oblong.

MAJOR. GREATER.

Plantago. Sloane, v. 1, p. 199. *Foliis latioribus subrotundis quinque nerviis ad marginem appendiculatis.* Browne, p. 145.

Leaves ovate, smoothish, shorter than the petiole; scape round; spike having the florets imbricate; seeds very many.

The root is the thickness of the thumb, præmorse, or stumped, laying strong hold of

of the earth by its fibres, which strike deeply, and are whitish: leaves petioled, seven to nine ribbed, somewhat hairy when young, about a hand in length, often remotely toothed about the edge. Petioles long, convex on the under side, concave above, each forming a kind of sheath at its base; scapes upright, pubescent, longer than the leaves. Spikes cylindrical, very long, linear, composed of many closely imbricate flowers, under each of which is a lanceolate concave bracte. Divisions of the calyx ovate, concave, blunt, smooth, nearly equal; anthers purple, two-celled, each cell terminating at bottom in a point; style villose. Capsule superior, covered with the shrivelled corolla, papery; seeds few. Browne observes that "this plant, whether introduced here originally, or a native, is very common in most parts of the island, especially in the cooler mountains; it is indeed found in many places where we have no reason to think it had ever been cultivated by the human species, but birds might probably have done the work. Every part of the plant is considered as a gentle sub-astringent; the seeds are frequently used in vulnerary waters and mixtures; and the leaves often applied with success to sores and wounds." The seeds afford food for birds, and cattle eat the leaves. For an hæmorrhage of blood, take as much English plantain leaf as when squeezed will fill a table spoon with the juice, which is to be drank, and the dose repeated at intervals as wanted. This simple application has never been found to fail. The juice of this plant is a good eye-water.

Inwardly used, the leaves have been found beneficial in pthysical complaints, spitting of blood, and fluxes. The seeds, however, seem better adapted to relieve pulmonary complaints, being more mucilaginous. The roots have also been recommended for the cure of tertian intermittents. An ounce or two of the expressed juice, or the like quantity of strong infusion, may be given for a dose; in agues the dose should be double, and taken at the commencement of the fit. Plantain is said to be a cure for the bite of the rattle-snake, but probably with little foundation, although it is one of the principal ingredients in the remedy of the negro Cesar, who, for the discovery, received a considerable reward from the assembly of South Carolina.

PLANTAIN-TREE.

MUSA.

CL. 23, OR. 1.—*Polygamia monoecia.* NAT. OR.—*Scitamineæ.*

This received its generic name in memory of Antonius Musa, the freedman of Augustus.

GEN. CHAR.—Hermaphrodite flowers more, towards the base of the simple spadix, sepearate in alternate spathes: Calyx a partial ovate-oblong spathe, plano-concave, large, many-flowered; corolla unequal, ringent; the petal constituting the upper lip, but the nectary the under lip; petal erect, ligulate, truncate, five-toothed, converging in front at the base; nectary one-leafed, cordate, boat-shaped, compressed, acuminate, spreading outwards, shorter than the petal, inserted within the sinus of the petal; stamens six awl-shaped filaments, five of which within the petal are erect, the sixth, within the nectary, reclining; anthers linear, from the middle to the top fastened to the filament, but most frequently there is only one anther on the sixth filament, and very small ones or none on the rest; the pistil has a very large germ, obtusely three-sided, very long, inferior; style cylindric, erect, the length of the petal; stigma headed, roundish, obscurely

scurely six-cleft; the pericarp a fleshy berry, covered with an husk, obscurely three or six-sided, gibbous on one side, one-celled, hollow in the middle; seeds very many, nestling, sub-globular, wrinkled-tubercled, excavated at the base, or only rudiments. Males on the same spadix, above the hermaphrodite flowers, seperated by spathes: Calyx, corolla, and nectary, as in the hermaphrodites; the stamens have filaments as in the hermaphrodites, equal, erect; anthers the same, on the filament placed within the nectary, most frequently very small or none; the pistil has a germ as in the hermaphrodite, but less; style and stigma the same, but less, and more obscure; pericarp abortive. Two species are cultivated in Jamaica.

1. PARADISIACA.

PARADISE.

Musa, caudice viridi, fructu longiore, falcato, anguloso. Sloane, v. 2, p. 141. *Spadice nutanti, fructu triquetro oblongo majori.*—Browne, p. 363.

Spadix nodding; male flowers permanent.

Root a perennial, roundish, solid, watery, bulb, dusky on the outside, white within. Stem soft, fifteen or twenty feet high, very straight, quite simple, round, smooth, fungous, watery, lamellated; the lamellæ convoluted, each ending in long channelled embracing petioles, imbricate at the base. The lower part of the stem is the thickest, in good soil often a foot in diameter, diminishing gradually to the top, where the leaves come out on every side; these are often eight feet long, and from two to three feet broad, with a strong fleshy mid-rib, and a great number of transverse veins running from the mid-rib to the borders. The leaves are thin and tender, so that they are generally torn by the wind; for as they are large it has great power against them: these leaves come out from the centre of the stalk, and are closely rolled up at their first appearance, like a perpendicular spike, but gradually expand and turn backward. As these leaves come up thus rolled, their advance upward is so quick, that their growth may almost be discerned by the naked eye; and if a fine line is drawn across, level with the top of the leaf, in an hour's time the leaf will be an inch above it. When the plant is grown to its full height, the spikes of flowers will appear in the centre, which is often near four feet in length, and nods on one side. The flowers come out in bunches; those in the lower part of the spike being the largest; the others diminish in their size upward. Each of these bunches is covered with a spathe or sheath of a purple colour, which drops off when the flowers open. The upper part of the spike is made up of male or barren flowers, which are not succeeded by fruit, but fall off with their covers. The fruit or plantains are about a foot long, and two to three inches diameter; it is at first green, but when ripe of a pale yellow colour. The skin is tough; and within is a soft pulp of a luscious sweet flavour. The spikes of fruit are often so large as to weigh upwards of forty pounds. The fruit is generally cut before it is ripe. The green skin is pulled off, and the heart is roasted in a clear fire for a few minutes, and frequently turned; it is then scraped and served up as bread. This tree is cultivated on a very extensive scale in Jamaica, and forms a principal part of the food of the negroes; to whom it is, either roasted or boiled, a palatable and strengthening food. Plantains will also fatten horses, cattle, swine, dogs, fowls, and other domestic animals.

The

The young leaves, before they disclose themselves, are most beautifully smooth and soft, and employed as dressings for blisters, than which none can be more proper.— The water from the soft trunk is astringent, and employed by some to check diarrhoeas.

This, as well as the banana tree, hath the name of *musa*, and they are so alike, that, unless persons are well acquainted with them, they would not know one from the other at sight; but the fruit differs, they being much longer and larger than the banana.— The fruit of this tree is the best of all the Indian food for negroes, and makes them the most able to perform their labour, and therefore must be of great nourishment.— Roasted before they are ripe, they eat like bread; they are eaten boiled or roasted, and one roasted that is ripe, and buttered, eats very delicious.

If you thrust a knife into the body of one of these trees, there will come out a great quantity of clear water, which is very rough and restringent, stopping all sorts of fluxes: I have advised persons subject to spit blood to drink frequently of this water, which cured them.—*Barham, p. 147.*

This is cultivated in every inland settlement, or wherever the soil and seasons are propitious to it, with great care, as the fruit supplies a principal part of sustenance to the inhabitants, black and white. It thrives best in a cool, rich, and moist, soil, and is commonly planted in regular walks or avenues. It is propagated by the suckers, which spring up from the roots, set at the distance of six, eight, ten, or twelve feet apart, and the latter more commonly, as the root throws up every year a number of young sprouts, and consequently require a considerable space to be allowed for their extension.

When the bunch, or cluster, of fruit is gathered, the stem gradually decays; to prevent, therefore, the young suckers from being injured, the stem is always cut down close to the ground when the fruit is wanted, in order to assist the growth of the new plants.

The fruit is generally used when it is full grown; but, before it ripens, this is known by the colour, which turns yellow, as soon as it begins to grow ripe. It is peeled, and either roasted in embers, or boiled; and thus served up at table, instead of other bread. Many white persons, after being accustomed to it for some time, prefer it to bread, especially when young and tender. The negroes commonly boil it in their messes of salt-fish, beef, or pork, broth, and find it a very strengthening wholesome food. When the fruit is ripe, it becomes lusciously sweet; it may then be made use of for tarts, or sliced and fried in butter. The Spaniards dry and preserve it as a sweet meat; and, perhaps, it is wholesomer than many other sorts of confectionary that are more in vogue. The ripe fruit and maize together are the best food for hogs put up to fatten; and give their flesh and fat a most exquisite flavour and firmness.

The leaves are dried, and made into mats, and stuffing for matrasses, pads, &c.—*Browne & Long.*

The juice which flows from the skin of the green plantain, when cut, forms a good cement for broken china, or other earthen ware. Instances have occurred of the plantain-tree bearing two bunches at a time, which is, however, very rare and remarkable. One is mentioned in the *Columbian Magazine* for 1799, communicated by Mr. Robert Napier, as the production of a tree, in Southfield, his own plantation: one bunch was

nearly ripe, from the same stem, and closely joining the other, which was shooting out. He mentions having been forty-seven years in Jamaica, and never saw the like.

+ There is a variety known by the name of *maiden plantain*, the common kind being called *horse plantain*, which differs from it in being of a smaller and more delicate growth, and having red streaks on the stem; as also in smaller but much more clustered and numerous fruit; the maiden plantain bunch growing more like that of the banana, containing often from eighty to an hundred plantains, and weighing often eighty pounds, whereas the bunch of the common plantain seldom contains more than twenty. These trees bear fruit fit for use in from nine to twelve months after the suckers are planted, according to soil and seasons: the horse plantain takes three months to fill from the time it first shoots, and the maiden plantain four; the latter is the most delicate food.

2. SAPIENTUM. WISE.

Musa, caudice maculato, fructu, recto, rotundo, brevior, odorato.
Sloane, v. 2, p. 147. *Spadice nutanti, fructu brevior oblongo.*—
Browne, p. 363.

Spadix nodding; male flowers deciduous.

The banana-tree so much resembles the plantain, as hardly to be distinguished at first sight, but has its stem irregularly marked with black or dark purple spots, which the other has not. The bunches of fruit are more compact, and the fruit more numerous, shorter, and rounder, than that of the plantain. The fruit has also a thinner skin, and the pulp is softer, and of a more luscious agreeable taste when ripe, which may be eaten either raw, fried, or boiled, and makes excellent fritters. It is a delicate food when ripe, and roasted with the skin on. A banana or plantain drink is made by mixing either of them, when ripe, with water, until it is pretty well mixed with the fruit; then let it stand twelve hours and strain. The plants of this genus, now so generally cultivated in the West Indies were, it is thought, originally brought from Guinea, and imported into these islands from the Canaries.

When the natives of the West Indies (says Labat) undertake a voyage, they make provision of a paste of banana; which, in case of need, serves them for nourishment and drink: for this purpose they take ripe bananas; and, having squeezed them through a fine sieve, from the solid fruit into small loaves, which are dried in the sun or in hot ashes, after being previously wrapped up in the leaves of Indian flowering reed. When they would make use of this paste they dissolve it in water, which is very easily done; and the liquor, thereby rendered thick, has an agreeable acid taste imparted to it, which makes it both refreshing and nourishing.

+ This is very common, and its fruit so well known as to need no description. The Spaniards have a conceit, that if you cut this or the plantain athwart or crossways, there appears a cross in the middle of the fruit, and therefore they will not cut any, but break them. The Franciscans dedicate this fruit to the muses, and therefore call it *musa*. The Portuguese call them *figus derta*, others *figus martabana*; in Guinea *bananas*. Lodovicus Romanus, and Brocard, who wrote a description of the Holy Land, called them *Adam's apples*, supposing it to be the fruit that Eve took and gave to Adam, which is erroneous; but it is very probable, that their leaves might be the fig-leaves they sewed together to hide their nakedness; nay, one leaf alone was or is sufficient to do that, being very broad and long; I know none like it. They are a wholesome

wholesome fruit, and make a pleasant drink, exceeding English cyder; baked, they eat like an apple, and so they do in a dumplin; dried in the sun, they eat like a delicate fig. The juice of the leaves is good against a burn; the fruit comforts the heart, and cools and refreshes the spirits; made into a marmalade, or comfit, it is good for coughs and hoarseness, lenifies the sharpness of the humours deflucting upon the lungs, and allays the heat of urine.—*Barham, p. 15.*

The fruit of these two species may be regarded among the greatest blessings bestowed upon the inhabitants of this climate. Three dozen plantains are allowed sufficient to serve one man for a week, in lieu of other bread, and will support him much better.

The green leaves of both species are an excellent fodder for horses or cattle, as well as the stems; and, as their juice is somewhat restraining, preserve them from scowering too much after grazing on sour or salt-marsh grass.

The banana-fruit, ripe, has been noted for its efficacy in correcting those sharp humours which generate, or accompany, the fluxes to which Europeans are often subject on their first coming into the West Indies. It is somewhat surprising that captains of ships in this trade do not lay in a quantity of the roasted fruit of these trees, or plants, for their sea-store, especially as it might be kept for a long time, packed in the dried leaves, and stowed in tight casks, and requires only a fresh roasting, or heating, when wanted for use. It is a cheap, hearty, food, and would furnish the sailors with a wholesome and agreeable change, after a tedious repetition of salt-meat, and not only keep them free from scorbutic foulnesses, but serve the purpose of other vegetable aliment not so easily to be had at sea, and certainly much better for them than mouldy biscuit, full of weevils and dirt.—*Long, p. 783.*

The juice which drops from a bunch of bananas, hung up in the shade, makes a very good vinegar.

A great deal has been said and written lately as to the possibility of manufacturing a good hemp from the fibres of the different plants of this genus; and rewards of two hundred pounds have been paid, under an order of the assembly, for the best specimens produced of this hemp in each county of Jamaica. This is, however, no new discovery, for the Indians have been in the habit, since the first discovery of the New World, and no doubt long before, of making cloth from these fibres. The celebrated circumnavigator, Dampier, notices the process, more than a century ago, as follows: "They take the body of the tree, clear it of its outward bark and leaves, cut it into four quarters, which, put into the sun, the moisture exhales; they then take hold of the threads at the ends, and draw them out; they are as big as brown thread: of this they make cloth in Mindanao, called *saggen*, which is stubborn when new, wears out soon, and when wet it is slimy." The natives of the Phillipine islands give the name of *abaca* to the vegetable fibres of a species of the plantain, of which they make their cordage; and of which they have considerable manufactories.

The following is an account of the means made use of for obtaining this hemp, as laid before the committee of the house of assembly, by Dr. Stewart West, who gained the premium for the best specimen produced in the county of Surry:

MANUFACTURE OF HEMP FROM THE PLANTAIN-TREE.

"In order to fulfil the intentions of the honourable house of assembly, I proposed to myself to find out the most simple and expeditious process possible for manufactur-

ing hemp from the plantain-tree, that the general adoption of it might not be prevented by complex machinery, or tedious and difficult manipulations.

"I have now to give the result of my inquiries, and have to describe such a simple and easy process, as will enable any person to set on foot a manufacture of hemp, without much trouble or expence. The instrument I have employed is so simple, that a carpenter may make it in half an hour, and the whole process is so expeditious, that the hemp may be rendered fit for sale in a few hours after the trees are cut down: I mean the *undressed* hemp; for to dress it with a heckle, unless it were likewise spun and wove in the country, would be quite foreign to the purpose. The process of heckling is by no means so simple as it appears to be; and I can truly affirm that if a person, not bred to the business, attempt to heckle flax and hemp, he will convert the greater part of it into tow; besides, different modes of dressing are necessary, according to the manufacture to which the hemp is to be applied. That part of the process, therefore, can be executed better, and to much greater advantage, in Britain. But if the instrument be in good order, and proper attention be paid to the manufacture, the hemp will be rendered so clean as, in a great measure, to supersede the use of the heckle, especially for cordage.

"Though the filaments of the plantain-tree are naturally large, yet they are divisible, and may therefore, by dressing, be adapted to the manufacture of the finest fabrics, perhaps, to which flax and cotton can be applied. The division of the filaments, however, would be prejudicial in the manufacture of cordage; for, it appears, from an experiment of Count Rumford, that the agglutination of the fibres greatly increases their strength.

DIRECTIONS FOR MAKING THE CRAMP.

"Take a plank, six feet long, one foot wide, and two inches thick, set one end two feet deep in the ground, and apply a brace before to keep it steady; cut a notch on the top, six inches deep, and eight inches wide; notch the two uprights, half an inch wide, to admit the jaws, which must be made of hard-wood, the lower one twelve, the upper twenty, inches long; the lower is fixed, the upper is moveable on a pin at one end, and has a weight suspended at the other, which may be increased or diminished at pleasure. The upright, in which the upper jaw turns on the pin, may have a mortice, five inches long, in place of a notch, and two inches may be cut off from the other upright. The jaws are half an inch thick, and two inches wide, brought to an edge where they meet, which must be slightly serrated. If the jaws are made of steel, a quarter of an inch in thickness will be sufficient.

PROCESS FOR PREPARING THE HEMP.

- "1. Cut the plantain stems into lengths of four feet.
- "2. Separate the coats of which the stems are composed, and split the outer coats into ribbons about an inch and a half wide.
- "3. Separate the internal parts of the ribbons with a wooden knife, then
- "4. Draw them through the cramp till the filaments are clean.
- "5. Hang them to dry in the sun as soon as possible.
- "When the hemp is thoroughly dry, let it be plaited into pellets, of about half a pound, and tied up into bundles of twenty pounds each."

From experiments tried on the hemp made from the plantain-tree fibre, which was manufactured

manufactured into rope at his majesty's dockyard, Port-Royal, the following results were obtained :

	cwt. qrs lbs.		
King's nine thread inch rope, broke by the weight of.....	6	1	14
Dr. West's specimen.....	6	2	0
Specimen from the parish of St. Andrew.....	6	1	0
Ditto Portland.....	4	2	0
Ditto St. George.....	3	2	0

The above specimens were made of the same size as the king's rope.

It appears also from several experiments that the inside fibres are stronger than the outside, but spun together have a good average strength. This hemp incorporates freely with tar, and its goodness greatly depends in completely evaporating the sap ; otherwise the least fermentation greatly impairs its strength : it cannot, therefore, be too thoroughly dried before it is packed for use or exportation.

PLUM, COCCO—See COCCO PLUM.

PLUM, DAMSON—See DAMSON PLUM.

PLUM, HOG—See SPANISH PLUM.

PLUM, MAIDEN—See MAIDEN PLUM.

PLUM, SPANISH—See SPANISH PLUM.

PLUME-TREE.

Genus Doubtful.

CL. 8, OR. 1.—*Octandria monogynia.*

GEN. CHAR.—The calyx is an entire bell-shaped perianthium, lightly cut into four or five obtuse dents on its margins ; the corolla monopetalous, campanulate, twice the length of the perianthium ; the tube very short ; limb cut into four or five lanceolate segments, nearly the length of the tube, and sometimes patent ; the nectarium, or stamen, is cylindrical, supporting eight sagittated erect antheræ on its margins, with as many intermediate upright subulated segments ; the nectarium is somewhat shorter than the corolla ; the germen is semi-globose and hairy, having the style short, the stigma capitated and undivided ; the pericarpium is a globose capsule, splitting into three valves, and dividing into as many capsules, containing one or two seeds in each.

Plúmea floribus albes centibus, spicatis axillaribus, pinnatis lobis alternatis.

The plume-tree is very common in Clarendon mountains, and grows to the height of fifty or sixty feet, with a straight stem, which is commonly hollow at the heart, and about a foot and a half in diameter. It blossoms in November ; the flowers are very small, and of a whitish green. The leaves grow alternately on the middle-rib ; they are of a deep green, compact, substance. The wood is red.

POCKWOOD—See LIGNUM-VITÆ.

POISON

POISON BERRIES or BASTARD JASMINE.

CESTRUM.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Lurida*.

GEN. CHAR.—Calyx a one-leaved perianth, tubular, columnar; obtuse, very short; mouth five-cleft, erect, obscure; corolla monopetalous, funnel-form; tube cylindric, very long, slender; throat roundish; border flat, plaited, five-cleft; divisions ovate, equal; the stamens five filaments, filiform, attached longitudinally to the tube, emitting a toothlet inwards at the middle; anthers roundish, quadrangular, within the throat; the pistil has a cylindric, ovate, germ, the length of the calyx; style filiform, length of the stamens; stigmas thickish, obtuse, scarcely emarginate; the pericarp an ovate berry, unilocular, oblong; seeds very many, roundish. Two species are natives of Jamaica.

1. VESPERTITUM. EVENING.

Jasminum laurinis foliis, flore pallide luteo, fructu atrocæruleo, polypyreno, venenato. Sloane, v. 2, p. 96, t. 204, f. 2. *Fruticosum, foliis oblongo-ovatis, floribus fasciculatis pedunculatis alaribus.*—Browne, p. 173.

Filaments toothless; tube filiform; peduncles very short.

This has an ash-coloured bark, and rises seven or eight feet high; branches alternate, leafy, many-flowered. Leaves alternate, on short footstalks, spreading, elliptic, oblong, a little pointed, entire, veined, of a dark green colour, paler underneath, shining. Peduncles axillary, on the upper part of the branches, in a sort of corymb, erect, shorter than the footstalks, many-flowered, flowers pale yellow; berry blackish blue or deep purple, about the size of an English currant, containing in a blue pulp, a great many flat seeds of the same colour. This plant is very common in all the lowlands of Jamaica; the flowers emit a disagreeable odour, and the berries are reckoned very poisonous; nightingales are said to feed upon them.

2. HIRTUM. HAIRY.

Flowers sub-spiked, axillary; leaves sub-cordate, ovate-acute, underneath, with the branchlets rough with hairs.—Sw.

POISON HOGMEAT—See PELICAN FLOWER.

POKEWEED or MOUNTAIN CALALUE.

PHYTOLACCA.

CL. 10, OR. 5.—*Decandria decagynia*. NAT. OR.—*Miscellaneæ*.

This generic name is derived from a Greek word signifying a plant, and *lacca*, a sort of dye.

GEN. CHAR.—There is no calyx unless the corolla may be called so; corolla five roundish petals, concave, spreading, bent in at top, permanent; stamens eight, ten, or twenty, filaments, awl-shaped, the length of the corolla; anthers roundish, lateral; the pistil has an orbiculate germ, depressed, divided externally by swellings,

ings, ending in eight or ten very short, spreading, reflex, styles; the pericarp an orbiculate depressed berry, marked with ten longitudinal grooves, umbilicated with the pistils, and having as many cells; seeds solitary, kidney-form, smooth. Two species are natives of Jamaica.

1. DECANDRA. TEN-STAMENED.

Solanum racemosum Americanum. Sloane, v. 1, p. 199. *Assurgens ramosa, spicis florum longissimis, sustentaculis trigonis.* Browne, p. 232.

Flowers ten-stamened, ten-styled.

This plant is also known by the name of *Surinam* or *jukato calalue*, *red-weed*, and *fox-glove*. It is very common in Jamaica, and has a thick fleshy, perennial, root, divided into several parts, as large as middling parsnips. From this rise many purplish, herbaceous, stalks, about an inch thick and six or seven feet long, which break into many branches, irregularly set with large oval, sharp-pointed leaves, supported on short footstalks. These at first are of a fresh green colour, but as they grow old they turn reddish. At the joints and divisions of the branches come forth long bunches of small blueish coloured flowers, consisting of five concave petals each, surrounding ten stamina and ten styles. These are succeeded by round depressed berries, having ten cells, each of which contains a single smooth seed. The Portuguese had formerly a trick of mixing the juice of the berries with their red wines, in order to give them a deeper colour; but as it was found to debase the flavour, and to make the wine deleterious, the matter was represented to his Portuguese Majesty, who ordered all the stems to be cut down yearly before they produced flowers, thereby to prevent any further adulteration. The same practice was common in France till it was prohibited by an edict of Louis XVI. and his predecessor, on pain of death.

It is indigenous to this island, and found in all the cooler hills and mountains, where it grows very luxuriantly. It rises generally to the height of four or five feet, divided towards the top. It is called either red or white, from the colour of the flower-stalks; for all the branches terminate in long and slender spikes of those colours. The leaves and tender shoots are frequently used for greens.

The inspissated juice has been thought a specific, or at least a very powerful remedy, in open cancers, applied in form of a plaister.—*Browne*.

The root, pounded, when fresh, and applied as a poultice to the ulcers of pocky mules and horses, performs a certain cure. The dressing must be renewed every day, and, previous to the application, the parts affected are washed clean with a mixture of salt and lime-juice in warm water; and a drench of flour of brimstone in gruel, sweetened with melasses, may be given at the same time to assist the discharge. The poultice has been found no less effectual in healing sores on the human-body.* This plant is the same as the red-weed or poke of Virginia and New England, from which the Indians prepare a red dye for staining their baskets, skins, and several other manufactures.

Some

* In Mr. A. Robinson's MSS. a case is related of the cure of a farcied mule by the pokeweed. It had been for several years full of fistulas and running ulcers all over his body and legs. The roots of both the red and green sort were taken, just before the blossom appeared, pounded very fine, which was applied to the ulcers, after being washed. In a short time the mule was sound, and the hair grew on the parts that had been sore. The same application kills and destroys vermin in sores in two dressings.

Some dyers there are said to gather the roots and make a fine red tint of them; but I incline rather to think they make use of the flower, berries, and stalk, for this purpose, as they are all of a beautiful red; whereas the roots are very white. When the juice of the berries is put upon paper, or the like, it strikes it with a high purple colour, which is as fine as any in the world, but requires something to fix it, and prevent its fading.

A spoonful or two of the juice of the fresh root purges strongly, when it is dry it loses this quality. The young tender leaves have very little of it; but those which are old, large, and thick, are said to operate violently; nevertheless, I have known them boiled and eaten, in order to open the body in the dry belly-ache, and with great advantage and safety.—*Long, p. 771.*

An ounce of the dried root, infused in a pint of wine, and given to the quantity of two spoonfuls, operates kindly as an emetic, and is preferable to most others, as it hardly alters the taste of the wine. The roots are applied to the hands and feet in ardent fevers. Farriers give a decoction of them to drench cattle, and apply them in form of poultice for discussing tumours. Poultry are fond of the berries; but, if eaten in large quantities, they give the flesh a disagreeable flavour.—*Cutler, Mem. Amer. v. 1.*

Negroes use the seeds for washing coarse linen; they are very bitter, and impart that taste to birds which feed on them.

2. OCTANDRA. EIGHT-STAMENED.

Erecta, simplex aut vix divisa, foliis integris, sustentaculis spicarum rotundatis. Browne, p. 232.

Flowers eight-stamened, eight-styled.

This is the stature of the foregoing species; but the leaves are whiter; it is known by the name of *Spanish calaloe*. It seldom continues longer than two years, and flowers and seeds plentifully the first year. The stem is herbaceous, dividing at top into two or three branches; leaves ovate-lanceolate, six inches long, and almost three broad, having a strong mid-rib and transverse veins; pedicels an inch and a half long. The peduncles come out from the side of the branches, opposite to the leaves, are seven or eight inches long, two inches naked, the remainder has sessile flowers, white, with a blush of purple in the middle, cut into five segments almost to the bottom, and having from eight to fourteen stamens, and ten styles; berries flat, with ten deep furrows; cells the same number, with one or two smooth seeds in each. Browne says "It is a native of Jamaica, and cultivated in most kitchen gardens. It is a palatable wholesome green; the tender stalks are frequently served up for young sperages, and prove an agreeable succedaneum. It shoots spontaneously in every fertile spot in the island."

POLYPODY, OR MALE FERN.

POLYPODIUM.

CL. 24, OR. 2.—*Cryptogamia filices.* NAT. OR.—*Filices.*

This generic name is derived from two Greek words signifying many-footed, the roots having many tubercles.

GEN.

GEN. CHAR.—Capsules distributed in roundish dots, on the back or lower surface of the frond. Of this very numerous genus forty-two species have been found in Jamaica.

With fronds undivided.

1. LYCOPODIOIDES. LYCOPODIUM-LIKE.

Phyllitis minor scandens foliis angustis. Sloane, v. 1, p. 73. *Scandens, caule tereti hirsuto, foliis simplicibus lanceolatis, capsulis linearibus.* Browne, p. 97. Pol. 6.

Fronds lanceolate, quite entire, smooth; fructifications solitary; shoots naked.

Stems many, very long, slender and compressed, fixing themselves to trees like ivy, and putting out many branches, some very long, others short, covered all over with little narrow acute ferruginous scales, interspersed with abundance of small filaments. Fronds alternate, four inches long, and seven or eight lines wide towards the lower part; they are gradually narrowed towards the tip, which is blunt, and the edges are waved; they are membranous, and the upper surface is smooth and of a bright green; the fructifications are hoary, and in one row on each side of the mid-rib.—*Plumier.* Sloane says the stalk is compressed, and not so big as a hen's quill; and that it mounts forty feet. Browne calls it the climbing *polypodium*, with a slender hairy stalk, very common in the inland open parts of Jamaica, and frequent in Sixteen-Mile-Walk.

2. ANGUSTIFOLIUM. NARROW-LEAVED.

Fronds linear-lanceolate, very long, acuminate, rigid, with a convex margin; fructifications scattered; shoot creeping.—*Sw.*

3. GRAMINEUM. GRASS-LIKE.

Fronds acuminate, quite entire, smooth; fructifications solitary; shoot naked.—*Sw.*

4. MARGINELLUM. MARGINED.

Fronds wedge-shaped, linear, blunt, margined, smooth; fructifications solitary, crowded; shoot very short, naked.—*Sw.*

5. REPENS. CREEPING.

Fronds lanceolate, acuminate, smooth, entire; fructifications scattered; shoot creeping.—*Sw.*

6. PILOSELLOIDES. PILOSELLA-LIKE.

Phyllitidi scandenti, affinis minor, folio crasso oblongiori. Sloane, v. 1, p. 74, t. 28, f. 3. *Simplex repens, foliis minoribus ovatis, capsulis sparsis.* Browne, p. 97. Pol. 5.

Fronds lanceolate, quite entire, rough-haired; the barren ones ovate; fructifications solitary.

The small creeping *polypodium*, with oval leaves, is very rare in Jamaica; I found it in the mountains of St. Faith's, near the side of the river. It creeps along the ground, and casts its small oval leaves on both sides, in an alternate order; these seldom exceed an inch and a quarter in length, and lie commonly close upon the ground or rocks.—*Browne.*

7. PHYLLITIDIS.

Phyllitis arboribus innascens, folio non sinuato tenuiori rotundis pulverulentis maculis aversa parte punctato Sloane, v. 1, p. 72.—
Acaule foliis oblongis simplicibus, capsulis serialibus. Browne, p. 96. Pol. 1.

Fronds lanceolate, smooth, quite entire; fructifications scattered.

Root the thickness of a finger, five or six inches long, black on the outside, having many fibres. Fronds six or seven, from two to three feet in length, acute at the end, narrower at the base, widening gradually, smooth, bright green on the upper surface; waved at the edge.—*Plumier*. The simple *polypodium*, without a trunk, is very common in the woods of Jamaica; the leaves are thin and delicate.—*Browne*. It grows on the trunks of old trees.

With pinnatifid fronds and coadunate lobes.

8. SCOLOPENDROIDES. SCOLOPENDRA-LIKE.

Minus acaule, fronde inferne partita, superne lobata capsulis linearibus. Browne, p. 97. Pol. 4.

Segments rather obtuse, the lowermost remote.

The small simple lobe-leaved *polypodium's* leaves rise together from a fibrous root, and seldom grow above five or six inches in height; the foliage is divided into small distinct parts towards the bottom, but as the plant rises these are confounded together, and it becomes a lobed margin on each side of the stalk or rib. It thrives best in dry rocky places.—*Browne*. This is the *incisum* of Swartz.

9. PENDULUM. PENDULUS.

Fronds pinnatifid, sub-sessile, smooth, pendulous; lobes oblong, bluntish.—*Sw.*

10. TRICHOMANOIDES. TRICHOMANES-LIKE.

Fronds pinnatifid, somewhat hairy; lobes semi-ovate, obtuse.

11. MYOSUROIDES. MYOSURUS-LIKE.

Fronds pinnatifid, smooth; lobes united into a lanceolate top, fructiferous, the lower ones remote.

12. PECTINATUM. COMB.

Fronds pinnate, lanceolate; lobes approximating, ensiform, parallel, acute, horizontal; root naked.—*Sw.*

13. AUREUM. GOLDEN.

Fronds pinnatifid, smooth, and even; pinnae oblong, distant, the lowest patulous, the terminating one very large; fructifications in rows.

Root as thick as the thumb, and sometimes a foot long, round, much branched, knobby, and fleshy, green within, but without covered with very small golden scales, with holes in the middle of the knots, occasioned by fallen leaves. Fronds about a foot long, cut into seven or eight very deep segments, an inch wide, and three or four inches long, remote and acuminate; underneath is a double row of golden dots along the nerves of the segments. It grows on trunks of large trees.—*Plumier*.

With

With trifoliate fronds; peduncle with three leaflets.

14. TRIFOLIATUM. THREE-LEAVED.

Hemionitidi affinis filix major trifida auriculata pinnis latissimis sinuatis. Sloane, v. 1, p. 85, t. 42. *Tryphillum simplex, foliis majoribus margine quasi laceratis, capsulis sparsis.* Browne, p. 97. Pol. 7.

Fronds ternate, sinuate-lobed, the middle one larger.

Root four inches long, made up of round black scales, fibrous. Stem two feet high, mossy at foot, smooth, and reddish brown at top; divided into three broad leaves, two opposite, and one at top, which is largest, being ten inches long, and four broad near the base; variously sinuated on the edges, of a yellowish green colour, and thin. The undermost pair of pinnæ have ears. It grew on a shady hill on the banks of the Rio Cobre.—Sloane. The large simple *polypodium*, with three lacerated leaves, rises commonly to the height of twenty-four or thirty inches; its leaves are very large in proportion, and appear as if they had been torn at the margin. It grows in the more sandy inland mountains, and is frequent in the woods of St. Mary's.—Browne.

With pinnate fronds.

15. MURICATUM. THORNY.

Trichomanes majus totum album pinnis aculeatis trapezii figura.—Sloane, v. 1, p. 81, t. 36, f. 1, 2.

Fronds pinnate; pinnas fulcate-lanceolate, sub-serrate, eared upwards, at bottom and in front spiny; stipe scaly.

This has many long filaments and fibres for its roots, of a dark brown colour, having towards the top, where the root is round and solid, ferruginous hairs. Fronds from six inches to a foot and a half in length; pinnas set alternately as thick as they can stand from the very root, each of an irregular figure like a trapezium, having very small prickles at the corners, and a scarcely discernible mid-rib, on each side of which is a row of seeds in small ferruginous spots. It grew in crannies of rocks on the road to Sixteen-Mile-Walk.

16. SEMI-CORDATUM. HALF-HEART-LEAVED.

Frond pinnate; pinnas parallel, lanceolate, very smooth, obliquely cordate at the base; the lower lobe more gibbous; fructifications in four rows.—Sw.

17. SAGITTATUM. ARROW-LEAVED.

Frond pinnate; pinnas lanceolate, blunt, entire, having a toothlet on each side at the base, the lower one mutilated, triangular, minute.—Sw.

18. EXALTATUM. LOFTY.

Lonchitis altissima, pinnulis utrinque, seu ex utroque latere auriculatis. Sloane, v. 1, p. 77, t. 31. *Simplex foliis lanceolatis integris basi inequalibus sub-auritis; petiolis brevissimis, capsulis sparsis.*—Browne, p. 99. Pol. 14.

Fronds pinnate; pinnas ensiform, entire, gibbous at the lower base inwards, at the upper base upwards.

This fern seldom rises above two feet and a half or three feet in height; the stipe is very simple, and the pinnae pointed and entire; they are connected by very short foot-stalks, and project backwards on each side of them.—*Browne*. The pinnae are about an inch in length and half as broad; fructifications in two rows of ferruginous dots, one on each side of the mid-rib.—*Sloane*.

19. RHIZOPHYLLUM. ROOTING-LEAVED.

Fronds pinnate, decumbent, tailed at the tip, the fruiting ones rooting; pinnae ovate-deltoid.—*Sw*.

20. OBLITERATUM. OBLITERATED.

Frond pinnate; pinnae alternate, broad-lanceolate, attenuated, crenate; notches at the tip and base obliterated on both sides.—*Sw*.

21. CRENATUM. NOTCHED.

Frond pinnate; pinnae oblong-lanceolate, crenate, smooth; fructifications in double rows.

22. SIMILE. SIMILAR.

Lonchitis altissima, pinnulis raris non laciniatis. Sloane, v. 1, p. 77, t. 32.

Fronds pinnate; pinnae lanceolate, quite entire, distant, the upper ones smaller, dots in rows.

This was about five feet high; stipe a foot and a half long, roundish, dark brown, or blackish. Pinnae about two inches long, and three-quarters of an inch broad at the base, roundish and blunt at the end, not at all laciniated. On each side of the mid-rib many ferruginous round spots of fructification; there was about half an inch space between the pinnae, which were alternate. I found it on Mount Diablo.—*Sloane*.

23. DISSIMILE. DISSIMILAR.

Simpler, foliis lanceolatis integris distinctis tota basi affixis, supremo sub-hastato, capsulis solitariis. Browne, p. 100. Pol. 23.

Fronds pinnate; pinnae lanceolate, sub-pubescent, confluent, the lower ones distinct, dots scattered.

Browne calls this the simple *polypodium*, with distinct leaves.

24. REPTANS. CLIMBING.

Lonchitis asplenii facie pinnulis variis. Sloane, v. 1, p. 76, t. 29, and t. 30, f. 1.

Divisions somewhat hearted, ovate, obtuse, crenate, slightly auricled at the base; frond creeping, rooting at top.

The face of this plant, and difference of the pinnules, make it difficult to assign it a right place, for almost every stipe has different pinnules. It is sometimes a foot and a half long, stem green and somewhat hoary. Some of the pinnules are oblong and somewhat auricled on both upper and under side, and towards the point are rounder leaves: on other twigs the leaves are joined close to one another, after the manner of *asplenium*. Sometimes the leaves are oblong, and eared above and below, and disjointed without

without any cohesion up to the top; at other times they are auriculated, disjoined, and towards the top grow weak, trailing and touching the ground take root; so that I have not seen, in any plant, so great a sporting in nature as in this. Another variety is the leaves which are serrated, and take root when they touch the ground.—*Sloane*.

25. SERRA. SAW-LEAVED.

Filix non ramosa major, surculis raris brevioribus pinnulis crebris latis brevibus non aculeatis. *Sloane*, v. 1, p. 90, t. 48, f. 2.

Frond bi-pinnatifid; pinnae linear, very long, attenuated, serrate; serratures semi-ovate, acute, striated.

26. TETRAGONUM. SQUARE-STALKED.

Fronds bi-pinnatifid; pinnae lanceolate-acuminate, opposite, distant, horizontal; segments ovate, bluntish; stipe four-cornered.

27. DELTOIDEUM. DELTOID.

Frond bi-pinnatifid; lower pinnae abbreviated, entire, oblong, deltoid, reflex.

28. CICUTARIUM. CICUTA.

Minus triphyllum, foliis profunde divisis, lobis oblongis, sublobato crenatis. *Browne*, p. 97. *Pol.* 8.

Fronds ternate; leaflets bi-pinnate, lacinate at the base, bluntly gash-serrate, acuminate, the lowest more gibbous.

These plants rise three or four together, from a tufted fibrous root, and seldom exceed eight or ten inches in height; their foliage is divided very deep, and each lobe is again deeply crenated in the margin.—*Browne*.

29. INVISUM.

Filix non ramosa major, surculis crebris, pinnulis longis, angustis. *Sloane*, v. 1, p. 90, t. 50, f. 1, and t. 51.

Fronds pinnate, smooth; leaflets linear, very long, pointed, serrate-pinnate; pinnae lanceolate, falcate, acute, connate at the base.

This rises two feet high; leaflets about an inch distant, sometimes opposite, sometimes alternate, about seven inches long, and an inch broad at the base; the pinnules are about half an inch long, joined to each other at the mid-rib, having defective ends. It grew in inland woods.

With bi-pinnate or sub-pinnate fronds.

30. CORIACEUM. LEATHERY.

Fronds coriaceous, below tri-pinnatifid, above bi-pinnated; pinnae and pinnules acuminate.—*Sw.*

31. PATENS. SPREADING.

Filix non ramosa minor, surculis crebris, pinnulis brevissimis, angustis. *Sloane*, v. 1, p. 91, t. 52, f. 1.

Frond bi-pinnatifid, somewhat villose underneath; pinnae linear-lanceolate, elongated; pinnules oblong, acute, entire, the lowest longer.

Not

Not much more than a foot high; the twigs three inches long and half an inch broad; the pinnae are a quarter of an inch long, and joined together almost to the end, with ferruginous dots on the back, and of a yellowish green colour on the upper side. It grew on the banks of the Rio Cobre.—*Sloane*.

32. HIRTUM. ROUGH-HAIRY.

Frond at bottom tri-pinnatifid, towards the top bi-pinnatifid; segments ovate, blunt, almost entire; stipe and branches rough-haired.—*Sw*.

33. PUBESCENS. PUBESCENT.

Minus sub-hirsutum et simpliciter pinnatum, foliis distinctis sub-ovatis crenatis, capsulis sparsis. Browne, p. 101.

Fronds bi-pinnate, hairy; pinnae lanceolate-ovate, somewhat gashed, acute, the outer confluent.

This seldom rises above eight or ten inches, and is not common in Jamaica; it spreads into a branched foliage above the middle; these are simple, and furnished with oval, alternate, and jagged, leaves; both the foliage and branches of the plant are adorned with fine down.—*Browne*.

34. DICHOTOMUM. DICHOTOMOUS.

Filix femina, seu ramosa major; dichotoma pinnulis lonchitidis, scilicet longis, angustis, non dentatis. Sloane, v. 1, p. 102.

Dichotomous; fronds pinnate, pinnae linear-lanceolate, quite entire, horizontal, glaucous underneath.

This grows seven or eight feet high; stems as thick as a finger, smooth, shining, roundish, of a reddish colour, always divided into two branches, standing opposite, and they again into two others, which are for the most part three inches long, and made up of many inch-long pinnae, joined at bottom to one another, by a narrow membrane running along the mid-rib, thence growing very narrow, and ending bluntly, leaving an empty space between them; they are of a grass green colour above, paler below. At every one of the larger divisions of the stem stand twigs with pinnae, as in the tops of the branches.—*Sloane*.

Prickly, with scattered spines, or arborescent.

35. ARBOREUM. TREE.

Arboreum maximum, fronde tenuiori, caudice durissimo. Browne, p. 104. Pol. 41.

Fronds bi-pinnate, serrate; trunk arboreous, unarmed.

Fern-tree.—This plant rises by a considerable simple, hard, and ligneous, trunk, to the height of twenty or twenty-five feet; it is, like the other ferns and palms, furnished only with ribs, which fall off gradually as it rises, while the new shoots spring up from the top: it resembles the palm-tree both in the form and structure of its trunk also, being very hard immediately under the bark, but loose, soft, and fibrous, in the middle. It holds for many years, bears all the inclemency of the weather with ease, and is frequently used for posts in hogsties and other inclosures, where the smaller palms are not at hand.—*Browne*. The trunk is sometimes armed with spinules; the fronds

fronds seven or eight feet long, on roundish unarmed stipes; the leaflets lanceolate, serrate, smooth, bright green; and the fructifications in orbicular, rufous, scattered, dots.—*Loureiro*.

36. VILLOSUM. HAIRY.

Filix ramosa major, hirsuta, ramulis raris, pinnulis asplenii, scilicet crebris, latis, brevibus, subrotundis, non dentatis. Sloane, v. 1, p. 100.

Fronds bi-pinnate, hirsute; pinnae oblong-obtuse, the terminating ones acuminate.

Stalks many, about two feet high, each as big as a finger, very hairy, and about a foot from the ground divided into branches, the lowermost whereof are about nine inches long, almost opposite. Twigs more than an inch long, alternate, made up of broad, short, mostly entire, but sometimes notched, pinnules; roundish at the end, often united for some space by their edges, pale green; covered, as well as the stalks, branches, and mid-ribs, with a whitish strong short hair. It grew on the banks of the Rio D'Oro, in Sixteen-Mile-Walk.—*Sloane*.

37. SPINOSUM. SPINED.

Filix arborea ramosa, spinosa, caudice non diviso, pinnulis latis, densis, brevibus, tenuibus, minutim dentatis. Sloane, v. 1, p. 95, t. 56.

Fronds bi-pinnate, serrate; trunk arboreous, prickly.

Trunk twenty feet high, as big as the human leg, undivided, covered with the ends of the fallen petioles, which are dark brown, as big as the finger, two or three inches long, thick set with short and sharp prickles on its back. At about a foot from the trunk, each frond divides into opposite branches, placed near the bottom, at about six inches distance from each other. The branches are a foot long in the middle; the twigs come out alternately, being an inch and a half long, and about two-thirds of an inch broad in the middle; they are made up of pinnules one-third of an inch long and half as broad, blunt, indented, dark green above, pale green below, very thin, and so close set that there is no space between them. It grew in a gully between Guanaboa and St. Faith's, as also on Mount Diablo, in great abundance.—*Sloane*.

With fronds super-decompound.

38. DENTICULATUM. TOOTH-LETTERED.

Frond quadri-pinnate at bottom, at top tri-pinnate; smooth; pinnules well-ovate, gashed, tooth-letted; fructifications solitary.—*Sw*.

39. ARMATUM. ARMED.

Fronds quadri-pinnate; pinnules lanceolate, crenulate, smooth above, hirsute at bottom; fructifications crowded; branches and branchlets rough; trunk arboreous, prickly.

40. GLAUCUM. GLAUCCUS.

Fronds quadri-pinnate; branches and branchlets lanceolate; pinnae lanceolate, pinnatifid; segments ovate-acute, glaucous underneath.

41. DISSECTUM.

41. DISSECTUM. CUT.

Adiantum nigrum, ramosum, maximum, foliis seu pinnulis, obtusis, varie sed pulcherrime sinuatis et dentatis. Sloane, v. 1, p. 96, t. 57, f. 1, 2.

Frond quadri-pinnatifid, smoothish; pinnules ovate, blunt, gash-serrate; fructifications solitary; branches and branchlets pubescent.

This rises four or five feet high, having a smooth reddish brown shining stalk, the size of a finger, divided into alternate branches. Pinnules thick, blunt, variously sinuated, or deeply cut, especially on their upper sides, and indented about their round ends, of a dark green colour, and shining on the upper side. Fructifications in ferruginous spots, especially near the greater sinuations of the edges. It grows on Mount Diablo very plentifully.—Sloane.

42. EFFUSUM. SPREADING.

Adiantum nigrum ramosum maximum foliis seu pinnulis tenuibus longis acutis spinosis. Sloane, v. 1, p. 97, t. 57, f. 4.

Frond quinque-pinnatifid, smoothish, membranaceous; pinnules acute, finely serrate; rachis of the branches margined.

This rises three feet high, having a reddish smooth stalk, divided at one foot and a half from the ground into several branches, having their twigs, and they their pinnules after the manner of *adiantum nigrum*, only they are longer, thinner, and sharper at the point, having there a very little prickles, as well as others much smaller along their margin, where are no incisures, or very small ones. It is sometimes of a pale green colour, with almost pellucid thin leaves.—Martyn.

See FERNS.

POMEGRANATE-TREE.

PUNICA.

CL. 12, OR. 1.—*Icosandria monogynia.* NAT. OR.—*Pomaceæ.*

GEN. CHAR.—Calyx a one-leafed, bell-shaped, five-cleft, acute, coloured, permanent, perianth; corolla five roundish petals, from upright spreading, inserted into the calyx; stamens numerous filaments, shorter than the calyx, and inserted into it; anthers somewhat oblong; the pistil has an inferior germ, a simple style, the length of the stamens, and headed stigma; the pericarp a sub-globular pome, large, crowned with the calyx, divided into two chambers by a transverse partition, the upper having about nine, the lower about three, cells; partitions membranaceous; seeds very many, angular, succulent. Receptacle fleshy, dividing each cell of the pericarp two ways. There are two species, both generally cultivated in Jamaica.

1. GRANATUM. GRAINED.

Malus punica sativa aliis simplici flore. Sloane, v. 2, p. 163. *Fru-
ticosa major, ramulis crassioribus erectis.* Browne, p. 239.

Leaves lanceolate; stem arboreous.

This tree rises with a woody stem eighteen or twenty feet high, sending out branches the

the whole length, which likewise put out many slender twigs, rendering it very thick and bushy: some of these are armed with sharp thorns. The leaves are narrow, spear-shaped, about three inches long and half as broad in the middle, drawing to a point at each end, they are of a light-lucid green, and stand opposite. The flowers come out at the ends of the branches, singly or three or four together; frequently one of the largest terminates the branch, and immediately under that are two or three smaller buds, which continue a succession of flowers for some months. The calyx is very thick and fleshy, and of a fine red colour; the petals are scarlet. The fruit, according to Linneus, is a pome, according to Gærtner, an inferior berry. There are several varieties: the wild pomegranate, with single and double flowers; the sweet pomegranate; the small flowering pomegranate, with single and double flowers; and the pomegranate with striped flowers. The rind of the fruit and the flowers are the parts directed for medicinal use: they are both powerful astringents, and have long been successfully employed as such both internally and externally in gargles, in diarrhoeas, &c. The dose in substance is from half a drachm to a drachm; in infusion or decoction to half an ounce.—*Woodville*. As an astringent, the rind of the fruit, boiled in water, with cinnamon; port-wine and guava jelly to be added; is recommended in Dancer's Medical Assistant. A conserve may be made of the flowers or pulp with sugar. The rind should be dried after the heart is taken out; for if dried without scooping it always tastes musty. Sloane says, that the leaves beaten with oil of roses, applied to the head, cures its aching; that the powder of the fruit, dried in an oven, in a closed pot, cures fluxes; and that the rind, with galls, or instead of them, makes good ink. The pomegranate-tree thrives remarkably well in Jamaica; fruit have been found upon them weighing a pound and a half.

2. NANA. DWARF.

Fruticosa humilior, ramulis gracilibus patentibus. Browne, p. 239.

Leaves linear; stem shrubby.

This seldom rises more than five or six feet high. The flowers are much smaller than those of the common sort; the leaves are shorter and narrower; the fruit is not larger than a nutmeg, and has little flavour. It is an ornamental plant, as it continues flowering great part of the year. Both these plants are propagated from layers.

POMPION.

CUCURBITA.

CL. 21, OR. 10.—*Monoecia syngenesia.*

NAT. OR.—*Cucurbitaceæ.*

GEN. CHAR.—See Gourd, vol. 1, p. 332.

PEPO.

Leaves lobed; fruits glassy.

Stems thick, angular, extremely hispid, climbing by means of bifid tendrils, or spreading to a great distance, so that a single plant, if properly encouraged, will overspread twenty roods of ground. Leaves cordate, large, roundish, angular, toothed, wrinkled, hairy on both sides, on long, alternate, thick, flexuose, hirsute, petioles. Flowers yellow, lateral, solitary, on peduncles resembling the petioles, but shorter; teeth of the calyx large, gashed, waved, reflex. Fruit roundish, ovate-globular, pale green.

green on the outside, and commonly hispid, with bristly hairs, within having a spongy flesh, divided in the middle into three primary cells, each of which is double, and these are sub-divided into the proper cells of the seeds, which are very numerous, horizontal, elliptic, of a compressed lens shape, whitish, encircled with a rounded tumid margin, and within that with a raised line: it has four coats, the outmost very thin and transparent; the next leathery, brittle, and white; the third somewhat fleshy and green; and the inmost membranaceous and cob-webbed: albumen none; embryo elliptic, white; seed-leaves fleshy, slightly convex on the outside, flat within, veiny wrinkled.—*Gartner*. The fruit varies in form and size; two hundred and sixty of them, on an average the size of half a peck, have been produced from a single plant in New England. The pompion, in several of its varieties, thrives well in Jamaica, and is cultivated in most negro provision grounds, as an article of food they are very fond of. It is uncertain whence it was introduced, but most probably from America. If gathered when not much bigger than a hen or goose egg, and properly seasoned with butter, vinegar, &c. they make a tolerable good sauce for butcher's meat, and may also be used in soups. In England, when they are grown to maturity, a hole is made on one side, through which the pulp and seeds are scooped out, and the latter being picked out, the pulp is mixed with sliced apples, milk, sugar, and grated nutmeg; the whole is then returned into the shell, and baked in an oven, which goes by the name of *pumpkin pye*. They grow to a large size in Jamaica; Mr. A. Robinson mentions that he saw one which weighed forty-six pounds. Barham observes, that too much of them cause surfeits and fevers. An infusion or decoction of the seeds is a powerful diuretic.

See GOURD—SQUASH—WATER-MELON.

POND-WEED.

POTAMEGETON.

CL. 4, OR. 3.—*Tetrandria tetragynia*. NAT. OR.—*Inundatæ*.

This generic name is derived from Greek words signifying near a river; these plants growing in or near water.

GEN. CHAR.—No calyx; corolla four roundish petals, obtuse, concave, erect, clawed deciduous; stamens four filaments; anthers twin, short; the pistil has four ovacuminate germs, no style, obtuse stigma; there is no pericarp; seeds four, celled, roundish. One species has been found in Jamaica.

LUCENS. SHINING.

Potamogeton aquis immersum folio pellucido, lato, oblongo, acuto.—*Sloane*, v. 1, p. 141. *Aquaticum foliis oblongis, floribus spicatis.*—*Browne*, p. 150.

This aquatic plant is very common in those little rivulets about the Ferry; the narrowness of its leaves proceeds probably from its long continuance under water.—*Browne*.

See DUCKWEED.

POPE'S-HEADS—See MELON THISTLE.

POPONAX—See CASHAW.

POPPY—See YELLOW-THISTLE.

No English Name.

PORTLANDIA.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Rubaceæ*.

This was so named by Dr. P. Browne after the Dutchess of Portland, who was a great lover of botany, and well acquainted with English plants.

GEN. CHAR.—Calyx a five-leaved perianth, superior; leaflets oblong, lanceolate, permanent; corolla one-petaled; tube long, funnel form-ventricose; border shorter than the tube, five-parted, acute; stamens five awl-shaped declined filaments, almost the length of the corolla, from the bottom of the tube; anthers linear, erect, very long; the pistil has a five-cornered, roundish, inferior, germ; style simple, the length of the stamens; stigma oblong, obtuse; the pericarp an ob-ovate capsule, five-streaked, five-cornered, retuse, two-celled, two-valved, opening at the top; partition contrary; seeds very many, roundish, compressed, imbricate. Two species are natives of Jamaica.

1. GRANDIFLORA. GREAT-FLOWERED.

Foliis majoribus nitidis ovatis oppositis, floribus amplissimis. Browne, p. 164, t. 11.

Flowers pentandrous; leaves lanceolate-elliptic.

Stem shrubby, upright, branched, knotty, with a smooth bark, cracking longitudinally; branches opposite, spreading, round, scarcely divided, leafy, covered with smooth green bark; buds gummy. Leaves opposite, spreading, somewhat lengthened at the point, equal at the base, entire, very smooth, paler beneath, marked with alternate veins, projecting on both sides; footstalks very short, thick, round below, but flattish above; stipules between the leaves connate, triangular, pointed, very smooth, pale, closely pressed to the branch. Flowers axillary, mostly solitary, between the stipules, peduncled, a little nodding, very large, white, beautiful, most fragrant at night, in the bud yellowish, tipped with red; peduncles shortish, round, smooth; no bractes. Calycine leaflets ovate, pointed, a little curved backwards, keeled at the base, reddish towards the top. Tube of the corolla with five sharp downy angles, inflated at the top; limb in five nearly equal somewhat triangular segments, margins spreading, at length revolute; filaments on the germ, scarcely so long as the tube, downy at the base; anthers very long, vertical, straight; germ smooth; style a little longer than the stamens, declined, spiral, angular; stigma at length trifid; segments revolute.—*Smith*. Capsule sub-turbinate, crowned with the leaflets of the calyx, spreading very much, coriaceous, unequally five-cornered, ribbed at the corners; partition thin. Seeds elliptical thickish, flat on both sides, having raised dots scattered over them, rufescent, horizontal, with an umbilicus before they are fully ripe, fleshy, white, of a sharp pointed pyramidal form, fastened to the partition.—*Gartner*.—Browne, who gives an excellent figure of this plant, observes that it grows chiefly at the foot of the mountains, thriving luxuriantly among rocks, shooting generally to the height of eight or nine feet, but seldom exceeding two or three inches in diameter, covered with a thick furrowed bark. This plant has frequently flowered in the English gardens. Dr. Wright says the external bark has no taste. The inner is very thin and of a dark brown colour, and bitter astringent taste, and possessing virtues similar to the Jesuit's bark. Infused in spirits of wine, with a little orange peel, he recommends it as an excellent stomachic tincture.

M 2

2. COCCINEA.

2. COCCINEA. SCARLET.

Flowers pentandrous; leaves ovate coriaceous.

This is a shrub two or three feet in height, erect, branched; branches and branchlets round, smooth. Leaves opposite, ovate, or sub-oval, scarcely acuminate, quite entire, nerved, smooth, shining, underneath veined, paler, somewhat wrinkled, with a convex margin, three inches long and two inches wide; petioles short, thick, from round flattened a little, smooth; stipules interposed between the leaves, broad-ovate, acuminate, pressed to the stem. Flowers axillary, solitary, scarlet, on peduncles a little longer than the petioles, angular, smooth, coloured; calycine leaflets acute, coloured; corolla club-funnel-form, three inches long; tube five-cornered, at top ventricose; border five-cleft, segments ovate-acute, erect. Filaments the length of the tube, erect, equal; anthers longitudinal, very long, spiral, yellow; germ oblong, five-cornered, smooth; capsule roundish, crowned with the calycine leaflets, smooth, coloured. It differs from the first species in having the leaves nearly roundish or oval, coriaceous, veined underneath; the corollas smaller by half, and of a full scarlet colour; the capsules roundish. Native of Jamaica, in the western parts, on precipices of the mountains, but not common. It flowers there in June and July.—Sw.

PORT-MORANT TOBACCO—See TURKEY BERRIES.

POTATOES.

SOLANUM.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Lurida*.

GEN. CHAR.—See Calalue, branched, vol. 1, p. 141.

TUBEROSUM. TUBEROUS.

Stem unarmed, herbaceous; leaves pinnate, quite entire; peduncles subdivided.

The common potatoes, it is generally thought, came originally from North America, where they were not reckoned good for food. They were first, we are told, introduced into Ireland in the year 1565, and from thence into England, by a vessel wrecked on the western coast, called *North Meols*, in Lancashire, a place and soil even now famous for producing this vegetable in great perfection. It was forty years after their introduction, however, before they were much cultivated about London; and then they were considered as rarities, without any conception of the utility that might arise from bringing them into common use. At this time they were distinguished from the Spanish by the name of *Virginian potatoes*, or *battatas*, which is the Indian name of the Spanish sort. At a meeting of the Royal Society, March 18th, 1662-3, a letter was read from Mr. Buckland, a Somerset gentleman, recommending the planting of potatoes in all parts of the kingdom, to prevent famine. This was referred to a committee; and, in consequence of their report, Mr. Buckland had the thanks of the society, such members as had land were entreated to plant them, and Mr. Evelyn was desired to mention the proposals at the close of his *Sylva*.

In Jamaica the potatoe degenerates. It grows waxy, and acquires in time a more saccharine taste than those imported from Europe or America. It is not therefore much cultivated,

cultivated, although, in favourable situations, very good potatoes have been produced from foreign plants.

See CALALU—CANKERBERRY—EGG-PLANT—NIGHT-SHADES—TOMATOS—TURKEY-BERRIES.

POTATOE, SWEET—See SWEET-POTATOE.

No English Name.

POTHOS.

CL. 4, OR. 1.—*Tetrandria monogynia.* NAT. OR.—*Piperitæ.*

GEN. CHAR.—Calyx a globular spathe, one-leaved, gaping on one side; spadix quite simple, thickened, covered all over with little fructifications; there is no perianth; the corolla has four wedge-shaped, oblong, erect, petals; stamens four widish erect filaments, narrower than the petals, and of the same length; anthers very small, twin; the pistil has a parallelo-piped, truncate, germ; no style; stigma simple; the pericarp aggregate berries, roundish, two-celled; seed single, roundish. One species is a native of Jamaica.

VIOLACEA. VIOLET.

Parasiticum minus, foliis ovatis punctatis glabris, spica brevi.—
Browne, p. 333. Arum 13.

Leaves ovate-lanceolate, entire, nerved, dotted.

This is a sub-parasitical plant, with thick, long, filiform, simple, smooth, whitish, roots; stems several, heaped, two or three feet long, rooting, simple, thickish, round, stiff, knobbed, sheathed, leafy, smooth. Sheaths at the knobs of the stem, or at the insertion of the petioles, surrounding the stem, of a netted contexture, ferruginous. Leaves scattered, alternate, acuminate, convex, dotted but not perforated, membranaceous; petioles thickish, middling, round, channelled above, smooth, sheathing at the base. Scapes from the bosom of and scarce longer than the petioles, erect, round, smooth, solitary, three-cornered. Spathe ovate, concave, entire, shorter by half than the spadix, spreading; spadix half an inch long, cylindrical, green. What Linneus calls the corolla consists of four triangular valves, retuse at the tip, not to be distinguished but in the berry-bearing spadix. Filaments four, like petals, membranaceous, whitish, permanent, within the valves, closing up the germ, concealed so that the anthers appear to sit on the stigma; anthers twin, with one-valved lobes; germ roundish; stigma bifid; berry rolled up in the valves at the base, pellucid, violet-coloured, four-seeded; seeds oblong, remotely disposed in a square, white. Native of Jamaica, in the highest mountains, at the roots and on the trunks of trees.—Sw. Browne observed it in the woods about St. Ann's Bay, the stem of which was slender and shagged, and adorned with a few oval leaves; it stuck pretty close to the trunk of each tree as it grew upon, but seldom ran above two or three feet.

PRICKLY-PEAR—See INDIAN-FIG.

PRICKLY

PRICKLY-POLE.

COCOS.

CL. 25.—*Palmae*—*Monoecia hexandria*.NAT. OR.—*Palmae*.

GEN. CHAR.—See Cocoa-Nut, vol. 1, p. 206.

GUINEENSIS.

GUINEA.

Palma spinosa minor caudice gracili, fructu pruniformi, minimo, rubro.
Sloane, v. 2, p. 121. *Pinnis inferne vaginantibus, caudice tereti*
aculeatissimo, fructu minori. Browne, p. 343.

The whole spiny; spines bristle-shaped; fronds distant; root creeping.

Root knotty, round, thicker than the trunk, short, horizontally bent in directly below the surface, creeping, and presently putting out another trunk, so as to make a thicket, whilst it fixes itself firmly in the soil by slender fibrous roots. Trunk erect, armed with very numerous prickles, and furnished with some semi-lacerate withering stipes. The bark is brownish. Leaves sub-frondose, few, clasping at the base and pinnate; rib prickly; leaflets ensiform, acuminate, shining, flat, very slightly folded back at the base, serrate-prickly, unarmed, or with a few prickles only on both sides, commonly alternate, sometimes opposite, inconstant in number. Spathes axillary, solitary, spreading, permanent a long time after the ripening of the fruits, so that two or three withered leaves are frequently seen below the frond, with a spathe and spadix in their axils. Flowers with a very slight tinge of yellow, and without scent.—*Jacquin*. Calyx sometimes three-leaved; leaflets lanceolate-acuminate, many times smaller than the petals; corolla triquetrous, frequently three-parted almost to the base, like a three-petaled corolla.—*Sw*. Fruits dark purple, the size of a common cherry, containing an acid juice, of which the Americans make a sort of wine; they are eatable but not pleasant.—*Jacquin*.

Thirty or forty of these grow always together, having each a swelling at bottom, made up of interwoven or matted thongs; the stem is forty feet high and only four or five inches in diameter, thick beset with long prickles: the leaves grow like those of the cocoa-nut, but are longer in proportion, greener, and thick beset with prickles. The fruit is bigger than the largest pea; having a red skin, covering a sweet pulp, which incloses a hard white kernel. Negroes travelling very carefully avoid places where they grow, because of the many prickles that fall from them.—*Sloane*.—This slender tree is very common in the inland woods of Jamaica, and supplies the wild hogs with abundance of food, when its berries are in season. It is seldom above four and a half inches in diameter, though it generally rises to the height of twelve or fifteen feet; but both the leaves and flowers are disposed like those of the cabbage-tree. The outward part of the trunk is extremely hard and elastic, and looks much like whalebone; it is very fit for bows and rammers.—*Browne*. The fruit of this tree is said to be excellent in broth, and pigeons feed upon it. Barham says, "It is with this prickly palm that the Indians arm their arrows, being as hard as iron: The arrow itself is the flag of a sugar or wild cane, that grows out of the middle and top of the cane, being light, straight, and smooth as a dragon-blood cane. Of this they take about four or five feet, and, at the end, they put a small sharp spike, of about a foot long, of this prickly palm, in which they make nicks to lay their poison in, and beard it to hinder its being drawn out from the wounded part."

See COCOA-NUT and MACAW.

PRICKLY

PRICKLY-YELLOW WOOD.

XANTHOXYLUM.

CL. 5, OR. 5.—*Pentandria pentagynia*. NAT. OR.—

This generic name is derived from two Greek words signifying yellow and wood.

GEN. CHAR.—Calyx a one-leafed perianth, small, five-parted, scarcely obversable; corolla one-petaled, cut almost to the base into five oblong-ovate, spreading, snail-shaped; segments; stamens five erect spreading filaments, with roundish anthers; the pistil has a depressed germ, style scarcely any, stigmas five, erect, oblong, in a circular position; the pericarp a gibbous five-lobed capsule, divided beyond the middle; lobes sub-ovate, with one distinct cell in each; seeds ovate-angular, solitary.—*Browne*.

CLAVA-HERCULIS. HERCULES-CLUB.

Evonymo affinis arbor spinosa, folio alato, fructu sicco pentagono et pentacocco, ligno flavo santali odore. Sloane, v. 2, p. 28, t. 172.

Foliis oblongo ovatis et leviter crenatis, floribus racemosis, caudice spinosa, ligno sub-croceo. Browne, p. 189.

This tree is frequent in Jamaica, and grows to a very considerable size; its branches pretty much towards the top, and rises frequently to the height of twenty or thirty feet, or better; it is looked upon by many as a dye-wood, but is generally used in buildings, being a good timber-tree.—*Browne*. It has a grey whitish coloured bark, having many short thick spines or prickles, on stem and branches, growing to a large size as the tree increases in bulk, so as to become protuberances terminating in spines. Leaves in pairs or without order, composed of four, five, six, or more, pairs of lanceolate leaflets, sometimes opposite, sometimes not; they are about two and a half inches long, and about an inch broad near the base, of a dark grass-green colour above, paler below, on very short footstalks or none, without an odd one on the leaves that have alternate leaflets; but those with opposite leaflets have an odd one: multitudes of both kinds are to be found on the same tree. At the end of the branches come the peduncle, branching out and forming a loose panicle. Sloane observes that the greater spurs or prickles on the trunk, when beaten off, smell not unpleasantly, something like yellow sanders. The bark is somewhat aromatic.

Two spoonfuls of the expressed juice of the young roots, give ease in dry-belly-ache, relieve spasmodic symptoms, epilepsy, &c. Infusion of the roots a collyrium.—*Dancer's Med. Asst.* p. 290.

Hercules.—This sort of prickly wood is set thicker and fuller of protuberances and prickles, which are also much longer, than the other sorts, so that they look like Hercules's club, and it is therefore called *Hercules*. The wood is very yellow; its blossom is almost like the cassia fistula; after which comes a short flat pod, in shape and bigness of a man's thumb: It is first green, then red, and, when full ripe, very black, containing three or four flat seeds, like the Barbadoes flower-fence. The root of this tree, finely scraped, and applied like a poultice to the foulest ulcer, will cleanse and heal it; as hath been often experienced, and first discovered, by negroes.—*Barham*, p. 73.

The following observations and experiments, on the *xanthoxylum* or prickly yellow wood.

wood of Jamaica, were communicated, by Mr. Samuel Felsted, to the Royal Gazette, in which paper it appeared on the 15th of March, 1794:

“Several authors have treated of the *xanthoxylum*; but by comparing the descriptions given by Miller, Hughes, Browne, Linnæus, the American Philosophical Transactions, Long, and Barham, it will appear that very different trees are comprehended under this title. It is sufficient for the present purpose, that the prickly yellow wood of Jamaica is so generally known in this island, even at a distance, that no botanical knowledge is requisite to distinguish this tree from all others; and which the bare sight of once will enable every person to do ever after. Among the authors before mentioned, Barham is the only original one, within the writer's knowledge, who gives any account of a medicinal property in the *xanthoxylum Herculis*, yellow Hercules, Hercules club (*xan. arbor aculeata*), or common prickly yellow wood of Jamaica; and that merely as an external application of the root. Sir Hans Sloane frequently quotes Barham's manuscript, which was written about the beginning of this century.

“To shew that the *xanthoxylum* here spoken of possesses other valuable qualities, beside the one mentioned by Barham, is the principal motive of writing this tract.

“In June, 1790, the writer became acquainted with the valuable quality of a substance surrounding the roots of the *xanthoxylum*.

“The roots are thickly covered with a light, soft, powdery, substance, of a yellow colour, and an agreeable scent. After digging away the earth that covers and surrounds them, they are to be cut off, and the dirt separated by soaking and washing them in clean water. The farinaceous covering is then to be carefully scraped off, and dried by exposure to the sun. This powder, thoroughly dried, will keep for a considerable time, if properly secured in bottles.

“Its antiseptic qualities have been proved by the following experiment: Two pieces of lean beef, of equal texture and weight, were provided. One piece was well rubbed by the best Peruvian bark, and the other with the yellow powder from the *xanthoxylum* roots. They were both tied up in separate papers, and opened in fourteen days. That prepared with the *pulv. xanthoxylum* was perfectly sweet, and better preserved than the other prepared with the *cort. Peruv.*

“Applied to ulcers it has been attended with remarkable success, nor is it less serviceable for the cure of recent wounds. Not to multiply instances of its good effects in such cases, the following will prove it as efficacious on the diseased flesh of a living subject, as it was powerful in preventing putrescence in the animal substance before stated.

“An apothecary, in Kingston, had, for many months, on one of his legs, such deep and inveterate ulcers, extending from the ankle to the knee, that, after all attempts to heal them had failed, he was advised to submit to amputation. In this situation, an elderly female slave undertook to make trial of the *pulvis xanth.* and the cure was perfected by the following treatment: Twice a day the limb was well sweated over a bath, the steam of which was confined by a blanket, and the leg afterwards fomented with the same. The bath was made by boiling the leaves of the lime-tree, mallow, wild spikenard, rosemary, &c. to which were added some sliced limes. The ulcers were then entirely covered with the *pulv. xanth.* over which was applied the mashed leaves of the eye-bright, to confine the powder, and the whole rolled up in a suitable bandage. The regimen directed was abstinence from spirituous liquors, and inflammatory food; taking every morning and evening half a pint of the decoction of *lignum-vitæ*

vitæ and sarsaparilla, with a gill of the infusion of crocus metallorum, made by putting four ounces of the powdered crocus into a jug, with four gallons of spring water; which was kept forty-eight hours before the clearest part was decanted. His common drink was a decoction of lignum-vitæ and sarsaparilla.*

"It has been discovered that the decoction of the *xanth.* roots may be substituted for lignum vitæ.

"Thus far is considered the virtues of the excrescence of the bark as an outward application, but the valuable qualities of the roots are stated in the following narration, by a physician lately deceased, which is decisive on the subject, and affords rational ground for pursuing other experiments:

"Mr. Crosdaile purchased two negro wenches, in the beginning of 1792, the youngest of whom, at different times since, has been afflicted with a dry belly-ache, or colica pictonum. About two months ago, she was seized with it in so dreadful a form, that our every effort to remove the spastic constriction of the bowels, and procure some motions, proved ineffectual. To no purpose were emollient fomentations, anodyne or cathartic clysters, mild and drastic purges, castor oil, and ultimately blisters to the abdomen applied.—That horrid symptom of the volvulus, *vomiting of the excrements*, commenced and removed every ray of hope. In this situation she desired to have her sister with her, who, on seeing her deplorable condition, signified a wish of giving a nostrum communicated to her by their mother, and once employed to cure herself in a similar complaint in Africa. The request I readily complied with.—In the course of two hours she returned from the woods, with the root and flowers (as appeared) of some plant, pounded together in a calabash. Two spoonfuls of the expressed juice of this she gave her sister twice, at an interval of two hours each.—The first effect of this was a tranquil profound sleep of twelve hours duration; during which the pulse and breathing gradually returned to the natural state: after this all sense of pain and every bad symptom disappeared, and no other inconvenience did she experience save debility and light soreness from the passing of the purgative medicines, which came away copiously during the course of the following day. The sister was observed to boil the ingredients (after expressing the juice) in a large quantity of water, and gave it on the following day as a common drink. No reward or menace could induce her to discover the plants, until stratagem brought it to light. We induced another negro to dissemble a similar complaint, and prevailed with the wench to seek for and prepare the same cure. In complying with the request, we had her so narrowly watched,* as to discover the secret to be the fresh root of the *xanthoxylum*, in its infant state, intermixed with the saffron coloured flower of the wild sage, which last, I have since found to contribute nothing to its virtue. Having procured some of the sappy and smallest roots of the young trees, I expressed the juice, and began the experiment of its qualities upon myself, in tea-spoonful doses. From the first of these I found no other effects than an unusual flow of spirits. By continuing the dose, drowsiness, nausea, head-ache, &c. and at length sleep ensued, from which, however, I next morning awoke perfectly refreshed, and had three copious easy motions. Fearful of making any further experiments on myself, I determined my future should be on those of a different colour, and preserved some of the juice in rum and with syrup.—

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* To those unacquainted with the danger of abruptly healing very old ulcers, it is recommended to create an artificial drain, for a sufficient time, by issues; for the purpose of discharging the superfluous humour, which the habit has been accustomed to secrete; and which, for want of such revulsion, is well known by the faculty to terminate life suddenly.

These, as well as the fresh juice, I have frequently, since that period, administered in complaints of the bowels, (so frequent among the African race and their progeny) with every wished for success. On the estate of Mrs. O'Brien, an old man of eighty years was lately seized with convulsive fits every hour, in every character similar to epilepsy: To him, on being sent for, I immediately gave a wine-glass full of the juice preserved in rum. The fit which succeeded the first glass was unattended with strong convulsions; and the second was little else than a comatose state; after which a sound sleep of ten hours removed every appearance of disorder, except lassitude. This last mentioned anti-spasmodic virtue the xanthoxylum loses by being dried and powdered; its narcotic qualities being dissipated with the moisture of the plant."

"The decoction of the roots has succeeded admirably in throwing out the small pox (and has been long used by the negroes in the yaws), when such determination to the surface was thought requisite."

PRICKLY-WITHE—See INDIAN-FIG.

PRIMROSE-WILLOW.

JUSSIEUA.

CL. 10, OR. 1.—*Decandria monogynia*. NAT. OR.—*Calycanthemæ*.

This was so named in honour of Antoine de Jussieu, demonstrator of plants in the royal garden at Paris.

GEN. CHAR.—Calyx a five-cleft perianth, superior, small; leaflets ovate, acute, permanent; corolla five-petals, roundish, spreading, sessile; stamens ten filiform filaments, very short, with roundish anthers; the pistil has an oblong inferior germ; a filiform style; and a headed stigma, flat, marked with five streaks; pericarp an oblong, crowned, five-celled, capsule, gaping at the corners; seeds very many, disposed in rows. This differs from *oenothera* in the sessile permanent calyx, having no tube: hence *oen. octovalvis* and *hirta* belong to this genus, making five species natives of Jamaica.

1. REPENS. CREEPING.

Lysimachia lutea non papposa erecta, minor, flore luteo pentapetalo, fructu caryophylloide. Sloane, v. 1, p. 201, t. 128, f. 2, 3.—
Herbacea repens. Browne, p. 208.

Creeping; flowers five-petaled, ten-stamened; leaves ovate-oblong.

Roots simple, filiform, short; stem branching, creeping; branches long, sub-divided, divaricating, somewhat succulent, round, smooth. Leaves on short petioles, scattered, small, blunt, spreading, entire, very smooth, with smaller ones in the axils; peduncles short, one-flowered, round, thickish, smooth; two very minute scales at the base of the germ; flowers yellow, small; calyx five-parted; segments lanceolate, the length of the petals; petals sub-sessile, ovate, blunt, veined; germ attenuated at the base, style thick, stigma convex; capsule thickish, opening longitudinally; seeds disposed longitudinally in five rows, angular, compressed. Native of Jamaica in moist watery places, flowering in spring.—Sw. It rises ten inches; stem green, round, succulent, smooth, and brittle, pedicels red, flowers large, yellow, making

making a fine show; it grows among mud.—*Sloane*. Browne says it is frequent in the lowlands about Plantain Garden River. Barham calls it *clove strife*, and the following species *loose strife*; and says the Indians highly esteem both, and make poultices of the leaves, which mollify and dissolve all kinds of tumours. He also says they are excellent wound-herbs, stop bleeding inward or outward, and cure sore-throats, sore-eyes, and venereal ulcers. The juice or essence stops spitting of blood and bloody fluxes. A cataplasm or ointment is an excellent balsam; the distilled water a cosmetic. Browne observes that all the species of this genus are mild sub-astringents and vulneraries, which may be very properly administered in infusions upon all occasions where such medicines are required.

2. OCTOVALVIS. EIGHT-STAMENED.

Assurgens glabra, foliis lanceolatis alternis, integerrimis, floribus solitariis alaribus. Browne, p. 208.

Upright; flowers four-petaled, eight-stamened, peduncled; capsules many-valved; leaves lanceolate.

Branches almost upright, four-cornered, pubescent; leaves acuminate, entire, dotted underneath at the edge, nerved, pubescent; on short petioles; leaflets in the axils ovate, minute. Flowers on short peduncles, large, yellow. Calyx sessile, four-leaved; leaflets ovate-acuminate, pubescent; petals four, three times as large as the calycine leaflets, distant, ovate, or ob-ovate, blunt, spreading, deciduous; filaments eight, pressed close to the style up to the middle, the length of the pistil, awl-shaped; anthers ovate, incumbent, two-valved. Germ roundish-quadrangular, attenuated at the base, a little curved; style thick; stigma spherical. Capsule pedicelled, long, acuminate at the base, retuse, four-celled, four or eight-valved; seeds very many, roundish; receptacle quadrangular. Native of marshy places.—*Sw.*

3. PUBESCENS. HAIRY.

Lysimachia lutea non papposa erecta major, foliis hirsutis, fructu caryophylloide. Sloane, v. 1, p. 201, t. 127, f. 3.

Upright, villose; flowers five-petaled, ten-stamened, sessile.

Stem usually brown, strong, four or five feet high, having several hairy, red, angular, branches, thick set on every side with long, narrow, hairy, nerved, leaves, several of which come out together, some larger, some smaller; the larger three inches long, and scarcely one broad, light green, downy, and soft like velvet. The flowers are axillary, large, yellow, very open, on peduncles half an inch long. Capsule large, oblong, with four or five corners, containing much small yellowish seed.—*Sloane*.

4. ERECTA. ERECT.

Lysimachia lutea non papposa, erecta, foliis glabris, fructu caryophylloide. Sloane, v. 1, p. 37.

Upright, smooth; flowers four-petaled, eight-stamened, sessile.

Root annual; stem from two to four feet high, herbaceous, very much branched, four-cornered, smooth, reddish; branches filiform, quadrangular, erect, sub-divided, pubescent. Leaves petioled, linear-lanceolate, entire, acuminate, nerved, smooth; petioles very short, red. Flowers abundant, yellow, small; calyx four-leaved, leaflets ovate-lanceolate, acuminate, spreading, striated underneath, smooth; petals four,

four, distinct, ovate, entire, concave, deciduous; filaments eight, shorter than the petals, upright, contiguous to the pistil; anthers very minute, whitish, commonly glued to the stigma; germ quadrangular, reddish, smooth; style very short, round, thick; stigma spherical; capsule elongated, quadrangular, retuse, four-celled, four-valved; seeds very minute, roundish, ferruginous.—*Sw.*

5. HIRTA. HIRSUTE.

Assurgens hirsuta, floribus solitariis. Browne, p. 208.

Upright, hirsute; flowers four-petaled, eight-stamened; leaves ovate-acuminate, rough-haired underneath.

This is a shrubby plant with a hispid stem; branches hispid, alternate; leaves sessile, marked with parallel veins. Flowers large, sessile, contained in a large, hispid, four-leaved, calyx.

PRINCEWOOD—See SPANISH ELM.

No English Name.

PSYCHOTRIA.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT. OR.—*Stellatæ.*

This was so named from the Greek name of an herb in Dioscorides, so called from its delighting to grow in cold situations.

GEN. CHAR.—Calyx a very small perianth, five-toothed, superior, permanent; corolla monopetalous, salver or funnel-shaped; tube long, border short, five-cleft; segments sub-ovate, acute; stamens five capillary filaments, anthers linear, not exceeding the tube; the pistil has an inferior germ, a filiform style, and bifid stigma, with thickish blunt segments; the pericarp a roundish berry, crowned with the calyx, bilocular; seeds two, hemispherical, on one side convex and five-grooved, on the other flat. Twenty-two species of this genus are natives of Jamaica.

1. HERBACEA. HERBACEOUS.

Viola folio baccifera repens flore albo pentapetaloide fructu rubro trilocco. Sloane, v. 1, p. 243. *Herbaceum repens sylvaticum foliis subrotundo cordatis oppositis, floribus paucioribus alaribus, laciniis corollæ erecto-patentibus.* Browne, p. 161. P. 7.

Stem herbaceous, creeping; leaves cordate-petioled.

Stem filiform, round, smooth; leaves spreading, acute, bluntly serrate, smooth above and shining, below silvery and white; petioles long, roundish, erect, pubescent; stipules opposite, ovate, emarginate, white. Peduncles shorter than the petioles, erect, thickish, round, commonly radical, but sometimes axillary, few-flowered; flowers white; berry roundish, scarlet, crowned; seeds hemispherical, oblong, grooved. Native of Jamaica in shady places.—*Sw.* Browne says its characters agree pretty well with coffee; it is entirely a creeper, shoots by a very slender stalk, and roots almost at any joint. Barham calls it *violet*, and says, "This herb has a small, round, creeping, stem, putting forth at its joints many small fibrous roots, and having small branches at about

about an inch distance from one another, each of which is about an inch and a half long, having roundish leaves standing opposite to one another, on an inch-long reddish foot-stalk, in every thing resembling those of violets, only smaller and rounder. The flowers come out at the tops of the branches; they are white, and divided in their margins into five sections; then come several round smooth berries, as big as an English pea, containing, in an orange-coloured pulp, two long brown seeds. It loves to grow in shady moist places, by the sides of woods. The berries, or whole plant, boiled in whey, cure fluxes; and, boiled in oil, cure blood-shot eyes."—*Barham*, p. 202.

2. MYRSTIPHYLLUM. MYRTLE-LEAVED.

Myrte folio angusto acuminato, arbor racemosa baccifera, fructu sulcato seu cannulato diphreno. Sloane, v. 2, p. 102, t. 209, f. 2.
Myrstiphyllum minus fruticosum, foliis ovato acuminatis subrigidis oppositis. Browne, p. 152.

Stipules ovate-deciduous; leaves lanceolate-ovate, nerveless, shining, rigid; branches directed one way; racemes compound, terminating.

This tree has a smooth light coloured bark, and a trunk fifteen feet high, having a hard white wood; branches several, leaves mostly opposite, at the ends of the branches, having scarce any petioles, they are an inch long and half as broad, ovate-acuminate, smooth, and equal on the edges. At the ends of the twigs come the peduncles in bunches, having oblong flowers of a pale colour, succeeded by oblong berries, having two flat, oblong, pretty large seeds.—*Sloane*. Browne says it is common about the Ferry, and in the savanna near Hunt's Bay, seldom rising above four or five feet, and easily distinguished by its tufted bushy form and smooth leaves. It differs in habit from the *psychotrias*, and Browne made a new genus of it.

3. PEDUNCULATA. PEDUNCLED.

Foliis ovatis venosis, floribus quasi umbellatis, sustentaculis longioribus. Browne, p. 160. P. 4.

Stipules two-toothed; leaves ovate-lanceolate, somewhat wrinkled; flowers in a sort of cyme; common peduncle elongated.

This plant differs from all the other species in its sub-cymose inflorescence, and in having the common peduncles elongated. It grows in the interior mountain woods.

4. PUBESCENS. PUBESCENT.

Hirsutum foliis ovatis. Browne, p. 161. P. 5.

Stipules two-toothed; leaves lanceolate-ovate, acuminate, pubescent; panicles cymed, spreading.

This is a shrub, a fathom high, with the branches sub-divided, round, erect, pubescent. Leaves entire, nerved, pubescent, especially underneath, sometimes sub-tomentose, softish, from two to three inches long, on roundish petioles of a middling length; stipules interposed between the leaves, with awl-shaped short teeth. Panicles terminating, erect, the length of the leaves, with spreading sub-fastigate branchlets, almost forming a cyme, trichotomous, with a floret in the middle, commonly sessile; common peduncles an inch long, round, pubescent; bractes linear, opposite, at the sub-divisions of the panicle; flowers yellowish green; berry roundish, twin, crowned, pubescent,

pubescent, black, with a blue juice; seeds hemi-spherical, grooved and striated. It flowers the whole year, and is common in Jamaica and other West India islands.—Sw.

5. MARGINATA. MARGINED.

Fruticosum foliis plumbeis ovato acuminatis, floribus laxo racemosis.
Browne, p. 161. P. 6.

Stipules entire, acuminate, deciduous; leaves lanceolate-ovate, acute, cartilaginous bristly at the end; panicle loose.

This differs from the others in the leaves, which are ob-ovate, acuminate, cartilaginous at the edge, and furnished with many minute bristles, nerved and veined, dark green and shining above, beneath pale and somewhat glaucous, on roundish petioles. It grows in woods in the southern parts of Jamaica, flowering in spring.—Sw.

6. ASIATICA. ASIATIC.

Fruticulosum, foliis amplioribus ovatis stipulis rigidis interpositis, ramulis crassioribus, racemis umbellulatis, sustentaculis ternato-ternatis. Browne, p. 160. P. 2, t. 17, f. 2.

Stipules emarginate; leaves lanceolate-ovate.

This is a native of both East and West Indies, and Gærtner asserts that the fruit of the Jamaica plant is as like to that of Ceylon as one egg is to another. He thus describes it: berry small, ovate-globular, crowned with a short five-toothed calyx, marked with ten longitudinal deep grooves, two-celled; coriaceous when ripe, dry, bi-partite, of a light bay, inclining to straw colour. In each cell one seed, fastened to the bottom of it, flattish on one side, wrinkled transversely, and having a raised line along the middle; convex on the other side, with three large dorsal grooves, and two smaller marginal ones, dark-coloured. Gærtner makes Browne's second *psychotrophum* this species, Swartz attributes it to the *citrifolia*.

7. CROCEA. SAFFRON.

Fruticosum foliis ovatis venosis, stipulis bidentatis, racemis terminalibus croceis. Browne, p. 160, t. 13, f. 1, 2.

Stipules two-toothed; leaves ovate-acute, nerved; panicles erect, and peduncles saffron-coloured.

This is distinguished by the leaves being very much veined, and the panicles saffron-coloured.—Sw.

8. PAVETTA.

Ceraso forte affinis arbor racemosa, foliis laurinis ex adverso nascentibus subtus albicantibus, flore pentapetaloide. Sloane, v. 2, p. 96, t. 189, f. 4, & t. 202, f. 2.

Stipules subulate, deciduous; branches paniced, brachiate, trichotomous; tube of the corolla long; segments patent.

The branches have a whitish striated, smooth bark, under which was a white solid wood. Leaves opposite, on short pedicels, ovate-acuminate, three inches long and half as broad, smooth, dark green above, whitish below. Peduncles at the top of the branches; racemes many-flowered, umbel fashion. Berries always in clusters, two together, of a deep blue colour, containing one hard round seed.—Sloane.

9. ULIGINOSA.

9. ULIGINOSA. MARSHY.

Fruticosum foliis venosis ovatis oppositis, petiolis stipulatis, racematis terminalibus, baccis compressis. Browne, p. 160.

Stipules connate, acute, convex; leaves lanceolate-oblong; seeds compressed, crested; stem herbaceous, simple, erect.

Roots long, creeping; stem two or three feet high, herbaceous, only a little shrubby towards the bottom, thick, round, at the top leafy and smooth, somewhat succulent. Leaves a foot long, acuminate, entire, with arched nerves, shining, pale underneath; petioles long, round, thick. Peduncles the length of the petioles, round, smooth, three-parted at the top; branchlets shorter than the peduncle, many-flowered at the top; flowers sub-sessile, clustered, small, pale red; bractes acute, opposite, convex, at the sub-divisions of the peduncles: berry spherical, scarlet, when dry compressed; seeds plano-convex, compressed, crested on the other side. It flowers in spring.—Native of Jamaica, in lowest places on mountains.—Sw.

10. CORYMBOSA. CORYMBED.

Stipules two-toothed; leaves lanceolate-ovate, acute, sub-rigid, shining; flowers in corymbs; peduncles and pedicels coloured.

This is a shrub a fathom in height; the branches and branchlets sub-divided, upright, round, shining; the latter dark red; leaves entire, nerved, and veined, very smooth, shining, on short, round, smooth, petioles; stipules small, interposed between the leaves, with the teeth lanceolate. Flowers not in a true corymb, but in a panicle approaching nearer to that form than in any of the rest, especially when nodding with a load of berries; branchlets trichotomous, erect, fastigate; common peduncles shorter than the leaves, round, smooth, purple; bractes awl-shaped, coloured, at the sub-divisions of the panicle; flowers purple; berry roundish, twin, compressed a little, dark red; seeds hemi-spherical, striated. It flowers in summer in the high mountains.—Sw.

11. HIRSUTA. SHAGGY.

Stipules lanceolate, entire, deciduous; leaves lanceolate-ovate, acute, rough-haired; stem extremely hirsute; panicle spreading.

This differs from the rest of the species in its very remarkable shagginess, and extremely spreading habit. Native of Jamaica, in the southern parts, in old woods.—Sw.

12. ALPINA. ERMINE.

Stipules two-toothed; leaves lanceolate-ovate, membranaceous, netted-veined; panicles erect; corollas elongated, diaphanous.

This is a shrub from five to ten feet high, with the branches thick, four-cornered, smooth, almost simple; leaves acuminate at both ends, sub-ciliate, membranaceous, somewhat rigid, many-nerved, smooth on both sides; on round pubescent petioles; stipules interposed between the leaves, connate, membranaceous, truncated in the middle, having on each side a long linear erect, sub-ciliate toothlet. Panicle often shorter than the leaves; common peduncle an inch long, flattened or angular, smooth, sometimes red; branches decussated, from upright spreading, simply sub-divided; with the pedicels scattered, red, longer. Berry roundish, largish, two-grooved, crowned;

crowned; seeds hemi-spherical, grooved. It flowers in spring and summer, and is a native of the Blue Mountains.—Sw.

13. FOETENS. FETID.

Stipules acuminate, entire, deciduous; leaves lanceolate-ovate, acute, smooth; panicle spreading very much; branches reflex, filiform.

This differs from the *hirsuta* in its smoothness, and in having the branches of the panicle reflex. A peculiar very fetid, sub-acid, odour, proceeds from the branches when broken, and the leaves when bruised. Native of Jamaica, in the southern parts, in mountain woods.—Sw.

14. NERVOSA. NERVED.

Stipules oblong, emarginate, deciduous; leaves ovate-acuminate at both ends, nerved, somewhat waved; panicles sessile, almost erect.

This has a spreading habit; leaves ovate and nerved, margins slightly waved, and the stipules large; it grows in coppices.—Sw.

15. GLABRATA. SMOOTH.

Stipules acute, undivided, deciduous; leaves ovate, very smooth, shining; flowers paniced, erect.

This resembles the *asiatica* so much, that it may be only a variety; the leaves, however, are perfectly ovate and shining; whereas in that they are lanceolate-ovate and dark green, not shining. It grows on rocks in the interior of the island.—Sw.

16. INVOLUCRATA. INVOLUCRED.

Stipules two-toothed; leaves lanceolate-ovate, shining; racemes terminating, corymbed; pedicels three-flowered; flowers involucred.

This is a shrub from two to three feet in height, with round, knobbed, smooth, branches; leaves on short petioles, acuminate, entire, nerved and veined. Flowers sub-sessile, with a three-leaved involucre, and linear spreading leaflets or bractes, the length of the pedicels. Berry roundish, with a very minute calyx at top, black, ten-grooved; seeds hemi-spherical, grooved. Native of Jamaica and Guiana.—Sw.

17. PATENS. SPREADING.

Stipules two-toothed; leaves distich, lanceolate-ovate, membranaceous; branches spreading; panicles directed one way.

This is a singular species, having the branches of the panicle directed all one way.—It is a native of the Blue Mountains.—Sw.

18. CITRIFOLIA. CITRUS-LEAVED.

Stipules ovate, permanent; leaves elliptic, acuminate, sub-coriaceous; panicles short; berries oblong, ribbed.

The leaves are very like those of the lemon in colour and consistence. It is distinct from the other species in leaves, stipules, and berries.—Sw. Gærtner remarks that the berries are soft, one-celled, and red.

19. BRACHIATA.

19. BRACHIATA. BRACHIATE.

Stipules ovate, bifid; raceme terminating, compound; branches brachiate; flowers aggregate, sessile.

This shrub is a fathom in height, with upright, four-cornered, even branches.—Leaves oblong, acuminate at both ends, entire, nerved, and veined, smooth, somewhat wrinkled, paler underneath, on round petioles, which, together with the nerves, are pubescent underneath; stipules interposed between the leaves, wide, smooth.—Raceme almost upright; common peduncle round, flattened a little, elongated, pubescent. Branches spreading horizontally, three-parted at the top; pedicels very short. Flowers sessile, three or four, aggregate, pale; bractes wide, concave, sharp; at the base of the branchlets of the raceme, and of the pedicels, and under the flowers, pubescent. Berry oblong, crowned, two-grooved, very dark blue; seeds grooved. It flowers in May and June. Native of Jamaica, in high mountains in the southern parts.—Sw.

20. LAXA. LOOSE.

Stipules ovate-acute, deciduous; leaves ovate-acuminate; racemes in threes, terminating, trichotomous; branches and pedicels sub-capillary, loose.

Leaves, on very short petioles, from one to two inches in length, entire, smooth, pale, and very minutely dotted underneath, scarcely nerved, veined, on very short petioles; stipules very small, interposed between the leaves, entire, sub-ciliate; racemes two inches long, loose, compound; berry oblong, a little acuminate at both ends, smooth. Native of Jamaica in coppices on the mountains.—Sw.

21. LAURIFOLIA. LAUREL-LEAFED.

Stipules ovate-acuminate, deciduous; leaves lanceolate-ovate, acute, thickish, smooth; panicles erect; berries roundish.

This differs from the *glabrata* in having longer thickish leaves, larger flowers, and roundish berries. It grows in dry coppices.—Sw.

22. GRANDIS. GREAT.

Stipules deltoid, revolute at the edge, awl-shaped at the tip; leaves cuneiform-ob-ovate; stem angular.

This is suffruticose, and from twelve to sixteen feet in height. Stem upright, sub-herbaceous, thick, stiff, grooved, smooth; with herbaceous, stiff, angular, smooth, branches, and axillary grooved branchlets. Leaves a foot and more in length, and three inches wide, with a short point, quite entire, nerved and veined, smooth, paler underneath, on short, thick, roundish, petioles; stipules interposed between the leaves, wide, awl-shaped at the tip, smooth. Panicles large, at the ends of the branchlets; common peduncle sometimes longer than the leaves, roundish, upright, striated; branches in threes and fours, in a sort of whorl, stiff, somewhat compressed, margined, thicker towards the base, striated, three or four-parted, again sub-divided at the tip. Flowers numerous, on short pedicels, somewhat clustered, pale. Berry ovate, crowned with a very minute calyx; seeds plano-convex. It flowers in April, in mountain coppices, in the interior western parts of Jamaica.—Sw.

Of this genus Browne enumerates seven species, but describes none of them particularly;

cularly; he remarks, in general, that they are all very common in Jamaica, growing best in rich shady soil; that they are for the most part shrubby, and rise generally from six to seven feet: that the leaves are opposite in all, and the footstalks generally supported by stipules; the flowers are commonly in loose clusters, and terminate the stalks and branches; and that the seeds in all the species are pretty much like those of coffee. These plants were unknown to Linneus. The corolla differs in form in the species, being tubular, salver, or funnel-shaped; with the opening in some villose, in others naked. The inflorescence in almost all is raceme-panicled. The berry one or two-celled.

No English Name.

PTEROCARPUS.

CL. 17, OR. 4.—*Diadelphia decandria*.

NAT. OR.—*Papilionaceæ*.

This name is derived from two Greek words for a wing and a fruit, as the fruit is winged.

GEN. CHAR.—Calyx a one-leafed perianth, five-toothed; corolla papilionaceous; stamens ten filaments, with roundish anthers; the pistil has a roundish germ, awl-shaped style, and simple stigma; the pericarp a sickle-shaped legume; seeds few, solitary. One species is a native of Jamaica.

ECASTAPHYLLUM.

Frutescens, reclinatum; foliis ovato-acuminatis, integris, alternis.

Browne, p. 299, t. 32, f. 1.

Leaves simple, ovate-acuminate, silky underneath.

This is a shrub or a small tree, with a branched even stem, and spreading even branches; branchlets flexuose, round, pubescent, villose; leaves petioled, alternate, spreading in a double row, entire, nerved, pubescent; petioles short, round, thick, pubescent. Racemes scarcely longer than the petioles, axillary, almost simple, before flowering time convoluted; flowers numerous, directed one way, on very short peduncles, white. Calyx ferruginous and silky on the outside; the two upper teeth approximating; the three lower equal and acute; standard of the corolla roundish, entire, somewhat compressed, covering the wings, veined; wings sickle-shaped, contiguous to the keel, which is ovate, concave, bifid at the base, emarginate at the tip; filaments in two bodies, five in each, distinct at top; anthers minute, roundish; germ elongated, round; style curved in, ascending, the length of the keel; legume sub-orbicular compressed like a leaf, opening; containing one compressed seed.—*Sw.*—This shrubby plant is not uncommon in the lowlands about Kingston; it grows chiefly in swampy places, and runs generally to the length of seven or eight feet, in an oblique direction from the root. When the plant is young, the more tender leaves are beset with down, which falls off as they grow more hardy, and in time they appear quite smooth; they are always single.—*Browne.*

PUDDING-WITHE—*See VIRGINS BOWER.*

PUMKIN—*See POMPION.*

PURGING

PURGING SEA BINDWEED.

CONVOLVULUS.

CL. 5, OR. 1.—*Pentandria monogynia*.NAT. OR.—*Campanaceæ*.

GEN. CHAR.—See Bindweeds, vol. 1, p. 88.

BRASILIENSIS.

BRASILIAN.

Convolvulus marinus catharticus folio rotundo. Sloane, v. 1, p. 155.*Maritimus, foliis nitidis sub-rotundis emarginatis, petiolis biglandulis*. Browne, p. 153.

Leaves emarginate, with two glands at the base; peduncles three-flowered.

This, which is also known by the name of *sea-side potatoe-slip*, has a deep, white, oblong, root, with a great many long round stems, as big as the little finger, trailing and spreading to a considerable distance. The leaves are placed on them without any order, on two inches long pedicels; they are heart-shaped, or roundish, about two inches in diameter, having several ribs and a middle nerve, smooth, of a yellowish green colour. Flowers large, whitish purple, in threes, on long peduncles. Capsule large, oval, three-celled, with one seed in each cell, which are cornered, almost like those of the Spanish arbour vine. The whole plant is full of a milky juice, and smells very strong.—*Sloane*. It grows on the Keys near Port-Royal, and on the sandy-seashore; creeping a considerable way, and throwing out some short foliated branches, from space to space as it runs; the leaves are beautifully veined, and have a small notch at top; the root is a strong purgative, and sometimes used with success in hydropic cases.—*Browne*. Sloane says the leaves are used in baths for dropsies, and put on issues to draw them. The stalks and leaves are temperately warm and emollient. Plumier says he learned that the inspissated juice was very purgative, and a kind of scammony, and may be given as such, from twelve to fourteen grains; and may be corrected by sulphur, or cream of tartar; or with guavas or almonds.

PURSLANE.

PORTULACA.

CL. 11, OR. 1.—*Dodecandria monogynia*.NAT. OR.—*Succulentæ*.

GEN. CHAR.—Calyx a bifid perianth, small, compressed at the tip, permanent; the corolla has five petals, flat, erect, blunt, larger than the calyx; stamens many filaments, capillary, shorter by half than the corolla, with simple anthers; the pistil has a roundish germ, a simple short style, five oblong stigmas the length of the style; the pericarp a covered capsule, ovate, one-celled; receptacle free; seeds numerous, small. Four species are indigenous to Jamaica.

I. OLERACEA.

POT-HERB.

Portulaca latifolia seu sativa. Sloane, v. 1, p. 204. *Foliis cuneiformibus, floribus sessilibus*. Browne, p. 233.

Common purslane is an annual herbaceous plant, with a round, smooth, procumbent, succulent, stem, frequently red, and diffused branches, often throwing out fibres at the joints; leaves more or less wedge-shaped, oblong, blunt, fleshy, smooth, quite entire, sessile, clustered, especially at the ends of the branches. Flowers sessile,

scattered; corollas yellow, spreading; petals sub-truncate at the tip, and emarginate; stamens ten; capsule one-celled, opening horizontally; seeds round, black, very small.—*Loureiro*. The stamens vary in number from seven to fifteen. This plant was formerly much in request as a salad, but now seldom used. It grows very commonly in Jamaica, and becomes frequently a troublesome weed; from its sub-acid nitrous taste it is considered as a wholesome vegetable eaten with salt meat.

This plant, which is so much taken care of in England to cultivate in their gardens, grows wild in most parts of South America. It is a cooling and moistening herb, therefore good in burning fevers. I often prescribed, in America, the distilled water in fevers, especially where a flux attended them. It takes away the strangury, as well as the heat and scalding of urine in ardent fevers. Eaten raw, it cures teeth that are set on edge, and fastens them. The juice of the herb is singularly good in inflammations and venereal ulcers.

The herb, bruised and applied to the forehead and temples, allays the excessive heat and pains that occasion want of rest and sleep, and, applied to the eyes, takes away redness and inflammations. The juice, mixed with vinegar, takes away the St. Anthony's fire, and pimples in the face. The juice, with the oil of roses, takes out the fire of burnings by gun-powder, lightning, or scalding, but if it were mixed with goose-grease it would do better; the juice also, made up into pills, with gum tragacanth and arabic, cures those that evacuate or spit blood. The seed is more effectual than the herb, and is of singular use for all the purposes above-mentioned.—*Barham*, p. 154.

2. HALIMOIDES. HALIMUS-LIKE.

Portulaca erecta sedi minoris facie, capitulo tomentoso. Sloane, v. I, p. 205, t. 129, f. 3. *Halimus*.—*Minimus, foliolis oblongis succulentis tomentibus, summis ramulis densissime sitis.* Browne, p. 206.

Leaves oblong, fleshy; stem corymbose; flowers sessile.

This little plant is frequent in the dry savannas about Spanish Town and Kingston; it grows in beds, and spreads a little upon the ground, but the stems seldom exceed two or three inches in length; the leaves are disposed pretty thick at the top of the branches, and the flowers blow in the centre of them. There is a sort of cotton shoots about the flowers as the weed grows old, which in time spreads over most parts of it.—The calyx is bifid; corolla monopetalous, bell-shaped, cut very deeply into five segments; stamens eight to ten filaments, sometimes fewer, with roundish anthers; stigmas three or five-parted; pericarp membranaceous, roundish, one-celled, opening transversely; seeds few, roundish.—*Browne*.

3. PILOSA. HAIRY.

Anacampseros 2.—Supina minor, foliis linearibus turgidis, floribus summis ramulis confertis, stylo quinquefido. Browne, p. 234.

Leaves awl-shaped, alternate; axils hairy; flowers sessile, terminating.

This is an annual herbaceous plant, with very succulent stalks, of a purple colour, and branching out greatly; the lower branches lie near the ground, but those above are more erect; leaves narrow, of a lucid green; at the joints are tufts of white hairs, and

and between those come out the flowers, of a fine pink colour, but of short duration, seldom continuing open longer than five or six hours; they are succeeded by short roundish capsules, filled with small black seeds. Capsule opens transversely; receptacles five, free, distant, filiform, branched, erect, fastened to the bottom of the capsule. Browne says the plant was cultivated in many gardens about Kingston, on account of its constant greenness, and the frequent shooting of its flowers. It is a native of the smaller sandy islands beyond Port-Royal, and grows in spreading tufts or beds about the root; all its parts are very bitter, and frequently used as a stomachic and provocative of the menses, as well as a diuretic. It roots from the lower joints, and is very easily propagated, but thrives best in a warm rich soil.

4. FRUTICOSA. FRUTICOSE.

Portulacæ facie maritima fruticosa erecta amarican. Sloane, v. 1, p. 205. *Anacampseros* 1.—*Foliis radicalibus, mollibus, ovatis, glabris; scapo assurgenti, paniculato.* Browne, p. 234.

Leaves ob-ovate, flattish; peduncles racemed; calyxes five-leaved; stem shrubby, decumbent.

The leaves are round and succulent, and all disposed about the bottom of the stalk, which rises generally to the height of sixteen or twenty inches above the root. It is a beautiful shrubby plant, and grows in a gravelly soil. Calyx is a five-leaved perianth; corolla five or six-petaled; stamens from twelve to eighteen, with roundish anthers; the pistil has a roundish germ, an erect trifid style, and simple stigma; the pericarp an ovate one-celled, three-valved, capsule, dividing vertically; seeds many and roundish.—*Browne.*

QUAMOCLIT—See INDIAN CREEPER.

RADDISH.

RAPHANUS.

CL. 5, OR. 2.—*Tetradynamia siliquosa.* NAT. OR.—*Siliquosæ.*

GEN. CHAR.—Calyx four-leaved, erect; corolla four-petaled, cruciform; stamens six filaments, four longer, with simple anthers; glands four, two between each shorter stamen and the pistil, and two between the longer stamens and the calyx; pericarp an oblong silique; seeds roundish.

SATIVUS. COMMON.

Siliques cylindrical, torose, two-celled.

The common raddish is frequently cultivated in Jamaica, where it thrives well in all of its varieties. They are milder than the English raddishes, but become tough, spongy, and sticky, if not pulled in a fortnight from the time they are first fit for the table.

table. It is thought to be a native of China, and cultivated in England in 1597, as noticed in Gérarde's Herbal, but probably introduced there before that period. They are usually mixed and sown in the same bed as carrot seed, as they come speedily to perfection, and may be taken out of it before the carrot seed makes its appearance.—Raddishes are thought to be opening, attenuating, and antiscorbutic, but afford little nourishment, and are windy. They provoke urine, and are good for the stone and gravel.

RAMOON-TREE.

TROPHIS.

CL. 22, OR. 4.—*Dioecia tetrandria.* NAT. OR.—*Calyciflora.*

This generic name is derived from a Greek word signifying nourishment, from the leaves being good fodder for cattle.

GEN. CHAR.—No male calyx; corolla four obtuse spreading petals; stamens four capillary filaments, longer than the corolla. Female on a distinct plant: calyx one-leafed, very small, closely investing the germ; no corolla; the pistil has an ovate germ, a filiform two-parted style, and adnate stigma; the pericarp a substriated berry, wrinkled, one-celled; seeds single, sub-globular. There is only one species, which is a native of Jamaica.

AMERICANA. AMERICAN.

Foliis oblongo ovatis glabris alternis, floribus masculinis spicatis ad alas. Browne, p. 357, t. 37, f. 1.

This tree is twenty feet high at most, with nearly upright, round, even, branches; leaves oblong, acuminate, with the point blunt, entire, beneath netted-veined and paler. Male flowers in peduncled roundish aments, an inch long, erect, axillary, subsolitary; flowers approximating, minute, whitish. Female flowers in axillary racemes, two together, longer than the petioles, composed of seven or eight sessile, alternate, horizontal, flowers; germ pubescent; style parted at the base; segments length of the germ, spreading, and bent down, with ferruginous hairs on them; the fruit is a striated one seeded drupe. A clammy very white milky juice flows from an incision in the trunk of the tree, or from the branches when broken.—*Sw.* The leaves and tops of this tree make an agreeable wholesome fodder for all sorts of cattle and horses, and are often used as such in dry seasons, in the inland woody parts of Jamaica, where grass is frequently very scarce. The berries are generally about the size of large grapes, and of an agreeable pleasant flavour.—*Browne.*

RAQUETTE—*See* TORCH THISTLE.

RATTLEWORT.

CROTALARIA.

CL. 17, OR. 4.—*Diadelphia decandria.* NAT. OR.—*Papilionaceæ.*

This was so named because the seeds in the ripe pods make a rattling noise.

GEN.

GEN. CHAR.—Calyx a three-parted perianth; corolla papilionaceous; stamens ten connate filaments, with a fissure on the back, and simple anthers; the pistil has an oblong germ, simple style, and obtuse stigma; the pericarp a short legume, turgid, inflated, pedicelled; seeds one or two, globose, kidney-form. Three species are natives of Jamaica.

1. LOTIFOLIA. LOTUS-LEAVED.

Crotalaria trifolia fruticosa, foliis glabris, flore e viridi luteo minore.
Sloane, v. 2, p. 33, t. 176, f. 1, 2.

Leaves ternate, ob-ovate; flowers lateral, sub-racemed.

Stems sarmentose, slender, and weak, at bottom stiff and woody, but higher up herbaceous, round, from a foot to eighteen inches in height, and more; (Sloane says three or four feet); about the middle dividing into branches, on which, at short intervals, grow smooth ternate leaves. Flowers axillary, on peduncles, three or four together, yellow, resembling those of the common lotus; the banner longer than the other petals and reflex, but the edges inflex; legumes about an inch long, containing five or six seeds, rattling when ripe.

2. INCANA. HOARY.

Crotalaria trifolia fruticosa, foliis rotundis incanis, floribus spicatis e viridi-luteis, fructu pubescente. Sloane, v. 2, p. 34, t. 179, f. 2.

Leaves ternate, oval, villose beneath; racemes spike-form; keel tomentose at the edge; legumes sessile, hirsute.

Root annual; stem from two to four feet high, almost simple, erect, pubescent; leaves elliptic, entire, nerved; general petioles long, angular, horizontal, pubescent; partial very short, round; stipules solitary, deciduous. Flowers sub-racemose, greenish yellow, rather large; peduncles three or four-flowered, short, axillary; pedicels longer than the peduncles; bractes two, subulate, under each flower. Calyx five-cleft, silky; standard of the corolla fulvous, streaked; the rest yellow; stigma acute; legume sub-sessile, turgid-inflated, villose-pubescent, beaked with the permanent style; seeds oblong. It has the common smell of the leguminous tribe, but is fetid.—Sw. The seeds are of a reddish brown colour, and have each a notch. It grew in the Crescent and about Guanaboa.—Sloane.

3. SAGITTATIS. SAGITTATE.

Leaves lanceolate; stipules decurrent, solitary, two-toothed.

Root annual; stem herbaceous, half a foot high, or more, erect, sub-divided, strict, round, pubescent; leaves on very short petioles, alternate, entire, rounded at the base, hoary underneath, and somewhat hirsute; (but sometimes smooth). Stipules at the sides of the petioles, decurrent, bifid at the top, acute, as it were sagittate. Peduncles terminating, solitary, opposite to the petioles, strict, round, two or three-flowered; flowers yellow, pedicelled; calyx five-parted, two segments posterior, three anterior, ovate-lanceolate, hirsute; at the base are two or three leaflets. Standard of the corolla roundish, erect, spreading, pale; wings ovate, embracing the keel, which is bifid at the base and blunt at the end: five of the filaments shorter than the other five; anthers oblong, those of the shorter filaments smaller, roundish: legume sub-sessile, almost cylindric, veined, pellucid, when ripe blackish; seeds pedicelled, fixed to the suture in a quadruple row, kidney-form, shining.—Sw.

No English Name.

RAUWOLFIA.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Contortæ*.

So named in honour of Leonhard Rauwolff, physician in Augsburg, who published his travels in 1583.

GEN. CHAR.—Calyx a five-toothed, very small permanent perianth; corolla one-petaled, funnel-form; tube cylindrical, globular at the base, border five-parted, flat; segments roundish, emarginate; stamens five filaments, shorter than the tube, with erect, simple, acute, anthers; the pistil has a roundish germ, very short style, and capitate stigma; pericarp a sub-globular drupe, one-celled, with a groove on one side: seed two nuts, convex at the base, attenuated at the top, compressed, two-celled. One species is a native of Jamaica.

CANESCENS.

HOARY.

Solani fructu fruticosa, foliis laurinis oblongis integris subtus hirsutis, flore minore purpureo. Sloane, v. 2, p. 107, t. 188, f. 1, & t. 211, f. 1. *Fruticosa foliis verticillatis tenuissime villosis.* Browne, p. 180.

Leaves in fours, oblong-ovate, acuminate, pubescent; flowers terminating and axillary.

This is an upright shrub, the whole of it milky, from a foot to eight feet in height, with all the parts of a corresponding size, according to soil and situation; the younger branches sub-tomentose. Leaves in fours, ob-ovate, attenuated at the base, acute, wrinkled, tomentose underneath, quite entire, the two nearest longer than the other two; petioles hirsute, round. Common peduncles branched, terminating in fours. Flowers reddish, small, without scent; calyx five-leaved, leaflets lanceolate; segments of the corolla squared, emarginate, scarcely oblique; hairs in the throat without order; drupe obsoletely bifid, first red, then dark-coloured; nuts wrinkled, flat on one side, convex on the other, two-celled; kernels solitary, seldom more in a nut, one of the cells becoming abortive.—*Jacquin*. The berries are somewhat bigger than a common pea, of a compressed globose form, and, when bruised, they emit a very deep blue thick juice, which tinges the fingers like indigo. The tube of the flower swells at both ends, and narrows in the middle. Browne says this shrub is very common in the savannas about the town of Kingston, berries small, black, and succulent; the leaves grow in a verticillated order, and are beautifully covered with a light down, which is hardly perceptible to the naked eye. The whole shrub is full of milk, of a deleterious nature.

RED-BEAD-TREE.

SOPHORA.

CL. 10, OR. 1.—*Decandria monogynia*. NAT. OR.—*Papilionaceæ*.

GEN. CHAR.—Calyx a one-leaved perianth, five-toothed, gibbous above; corolla papilionaceous, five-petaled; standard oblong, wings oblong, the length of the standard,

standard, keel two-petaled; stamens ten distinct filaments, with small anthers; the pistil has an oblong germ, style the size of the stamens, stigma obtuse; pericarp a long legume, slender, one-celled, knobbed at the seeds, which are many and roundish. Two species are natives of Jamaica.

1. MONOSPERMA. ONE-SEEDED.

Glycine 3.—*Arboreum foliis oblongis, seminibus majoribus.* Browne, p. 298.

Leaves unequally pinnate; pinnae five-paired; legumes one-seeded; stem arboreous.

This is a small tree, ten feet high, with a whitish bark, and a hard wood; branches ferruginous-tomentose; leaflets smooth on both sides, and rigid; panicles terminating, branched; corolla large, blue, smelling sweet; legume ovate, villose, woody, in which there is only one large spherical scarlet seed, with a black spot. Native of Jamaica and other islands of the West Indies.—Sw. Browne says he saw this tree at Montserrat, where it rose by a moderate trunk, and spread much towards the top, that the seeds were pretty large, and well marked with a proportioned large spot.

2. OCCIDENTALIS. WESTERN.

Arbori coral affinis non spinosa, fraxini folio rotundiore, foliis et ramulis pubescentibus. Sloane, v. 2, p. 40, t. 178, f. 3. Galega 1. —*Fruticosa foliis subrotundis pinnatis; spicis simplicibus terminatis.* Browne, p. 289, t. 31, f. 1.

Leaves pinnate; leaflets numerous, roundish, hoary, sub-tomentose.

This is a shrub with a round, hoary, pubescent, stem, and round, spreading, sub-tomentose, branches; leaves on alternate, long, spreading, round, hoary, petioles, thickened at the base; leaflets opposite, mostly six-paired, with an odd one, entire, flat, hoary, white-tomentose beneath, on short round petioles. Flowers in a sort of spike; peduncle terminating, erect, a foot long, simple, round, many-flowered; flowers close, biggish, peduncled, yellow; calyx bluntly five-toothed, with the three lower teeth longer, hoary, pale green; germ hoary; legume pedicelled, very long, at first filiform, then swelling out and jointed; seeds roundish.—Sw. Browne calls it X the *shrubby goat-rue*, with round ash-coloured leaves, which grows chiefly in the lowlands near the sea, and rises generally to the height of six or seven feet. It is of a dark ash-colour, and bears many long pods of a roundish cylindric form, but swelling about the seeds. I doubt whether the leaves of this plant would not make good indigo.—Browne.

RED-BEAD VINE.

GLYCINE.

CL. 17, OR. 4.—*Diadelphia decandria.* NAT. OR.—*Papilionaceæ.*

This generic name is derived from a Greek word signifying sweet.

GEN. CHAR.—Calyx a one-leafed perianth, tubular, two-lipped, permanent; upper lip three-parted; the lateral segments linear, the middle one broader, bifid; lower entirely simple, linear; corolla papilionaceous; banner ovate-lanceolate,

straight, longer; wings oblong, very like the keel, but a little larger; keel two-petaled, acute, with a claw the length of the calyx; stamens diadelphous filaments, straight; anthers simple, roundish; the pistil has a germ shorter than the calyx; style subulate, the length of the stamens; stigma obtuse, ascending; the pericarp an ovate or oblong legume, compressed, acute, one-celled; seeds very few, kidney-form. Two species are natives of Jamaica.

1. PHASEOLOIDES. PHASEOLUS-LIKE.

Sylvestre scandens, foliis pinnato ternatis, floribus spicatis; siliquis bisperrimis medio coarctatis. Browne, p. 298.

Leaves ternate, villose underneath; racemes terminating.

Stem twining to a considerable height, and bearing many flowers towards the top. The legumes have two-seeds, and are contracted in the middle.—*Browne.*

2. RETICULATA. NETTED.

Leaves ternate, oblong-lanceolate, pubescent, the veins like network underneath; racemes axillary, sub-sessile; legumes oblong, compressed.

Stem twining, angular, softly villose, sub-canescens; leaves petioled, leaflets also petioled, the middle one an inch and a half long, the side ones a little smaller, all three acute, villose on both sides, soft, somewhat wrinkled, netted, and paler underneath; petioles tomentose; stipules ovate. Racemes axillary, solitary, longer than the leaves; pedicels solitary, distant; bractes ovate, attenuated, deciduous; calyxes five-cleft, the clefts linear-lanceolate, attenuated; legume sharp at both ends, pubescent, especially on the edges, brown; seeds two.—*Sw.*

RED-WITHE.

COMBRETUM.

CL. 8, OR. 1.—*Octandria monogynia.* NAT. OR.—*Calycanthemæ.*

GEN. CHAR.—Calyx a one-leafed perianth, superior, bell-shaped, four or five-toothed, deciduous; corolla four or five petals, ovate, acute, inserted into the calyx, and scarce longer than it; stamens eight or ten filaments, bristle-form, erect, very long; anthers a little oblong; the pistil has an inferior linear germ; style bristle-shaped, erect, very long; stigma acute; there is no pericarp, except the crust of the seed; seed single, four or five angled; angles membranaceous, acuminate. One species is indigenous to Jamaica.

LAXUM. LAX.

Spikes lax; leaves opposite.

Branches brachiate, the branches compressed a little at the tip, dusky ferrugineous, pubescent; leaves elliptic, large, entire, nerved. Flowers raceme spiked; common peduncle axillary on the terminating branches, erect, round, ferruginous, pubescent; racemules opposite, spreading, many-flowered; pedicels one-flowered; calyx goblet-shaped, four-cornered, villose within, coloured; petals four, with very short claws, inserted into the angles of the calyx, ovate, spreading, yellowish white; filaments eight, twice as long as the calyx, springing from the bottom of it; anthers ovate, minute;

nute; germ roundish, style subulate-filiform; capsule oblong, four-cornered, four-winged, one-celled; seed four-cornered, the corners membranaceous and red, one-celled. It varies with narrower, ovate-lanceolate, leaves.—Sw.

The following description of this plant is taken from Mr. A. Robinson's manuscript, who also gives its characters, which correspond, in every respect, with those given above from Dr. Martyn's Dictionary:

Scandens foliis ovatis, nervosis maximis oppositis; floribus axillaribus spicatis, petalis longioribus unguibus linearibus bracteis triangulatis. Capsulis quadralatis monospermis; racemis alaribus terminalibus.
A. Robinson.

This is a very large scandent shrubby plant, the stem is roundish, ligneous, brittle, about two inches in diameter, covered with a smooth ash-coloured bark towards the root, sending forth many branches, growing to the height of thirty, forty, or fifty, feet, diffusing themselves round the trees they happen to grow upon, and hiding them from sight. The branches are covered with a reddish brown bark, hence it derives its name. The leaves are large and nervose, from five to ten inches in length and six in breadth, of a pale green, with plain or indented margins, their middle ribs bending back for the most part, the mid-ribs of a yellowish green, whence proceed alternate veins, running obliquely forward to the margin, where these veins run; the leaf is deeply furrowed on its upper part, and consequently very prominent on the opposite side, supported by crooked swelling pedicels. The fruit grows on branched pedicels, rising from the bosoms of the leaves and the ends of the branches; they have quadrangular capsules turbinate at each end, from each angle rises a foliaceous wing, between each wing a deep furrow: these capsules are an inch and a half long and three-fourths broad from the edge of one wing to another; they consist of four valves, are monocular, and contain one quadrangular turbinate naked seed, marked with deep furrows, dividing it into four equal parts; this seed is of a pale yellowish green, and nothing else but the two seminal leaves folded together into this form, and further remarkable in having no proper cover, which, if I mistake not, is somewhat singular: however, nature, always provident, has taken care not only to endue these seeds with an excessive intolerable bitter taste, but also that the seed should germinate in the capsule, whose valves are so well glued together that nothing but the swelling of the seeds, or a violence equal thereto, can force them asunder. The leaves are of an astringent taste, and used by the negro doctors in astringent decoctions or baths for their dropsical patients.

This plant is common in the woods and morasses near Paul Island, in Westmorland, it has no tendrils, the ends of some of the branches twisting round the trees supply their places, while others bear the fruit and blossoms.

Dr. Martyn remarks, that this genus of plants is but imperfectly known, and being a very fine one deserves the attention of botanists. There are only four known species, all natives of warm climates, and it is doubtful whether all may not be found in Jamaica.

REDWOOD OR IRONWOOD.

CL. 10, OR. 3.—*Decandria trigynia.*

P 2

ERYTHROXYLON.

NAT. OR.—*Malpighiæ.*

This

This generic name is derived from the Greek words for red and wood.

GEN. CHAR.—Calyx a one-leafed perianth, five-cleft, turbinate; divisions ovate, sharp, very small, withering; corolla five ovate, concave, expanding, petals; nectary of five scales, emarginate, upright, coloured, inserted into the base of the petals; stamens ten filaments, length of the corolla, at the base connected by a truncated membrane; anthers heart-shaped; the pistil has an ovate germ, three filiform styles, distant, length of the stamens; stigmas obtuse, thickish; the pericarp an ovate drupe, one-celled; seed an oblong nut, obtusely quadrangular.—Two species are natives of Jamaica.

1. AREOLATUM.

Foliis ellipticis, lineis binis longitudinalibus subtus notatis; fasciculis florum sparsis. Browne, p. 278, t. 38, f. 2.

Leaves ob-ovate, mucronate; branchlets short, floriferous, sealy.

Stem shrubby, even, with long spreading and somewhat rugged branches; leaves petioled, alternate, ob-ovate, narrower at the base, entire, veined, sub-glaucous underneath, deciduous. Flowers in alternate bundles, on short peduncles, small and white; petals with claws, inserted into the edge of the segments of the calyx, oblong, convex, entire. Nectareous scales in the throat of the corolla, surrounding the stamens, waved about the edge; filaments, during the time of flowering, connate above the middle, afterwards cut more deeply, awl-shaped and white; anthers ovate, minute, yellow; germ roundish; styles awl-shaped, spreading very much; stigmas capitate, peltate; fruit an oblong drupe, resembling that of the berberry, acuminate, scarlet, including an oblong attenuated hard nucleus or nut.—Sw. This is a small but a beautiful tree; the leaves are of an oval form, and marked with two slender longitudinal lines upon the back, which were the utmost limits of that part of the leaf which are exposed, while it lay in a folded state. The flowers grow in little clusters, and are very thick upon the branches. The inward bark is of a flesh colour, and the wood of a reddish brown. It is reckoned an excellent timber wood, for the size of the tree, which seldom exceeds sixteen or eighteen feet in height, and five or six inches in diameter.—Browne. It grows in dry coppices.

2. ROTUNDIFOLIUM. ROUND-LEAFED.

Foliis minoribus subrotundis confertis, stylis brevissimis, ramulis tenuissimis. Browne, p. 278.

Round leafed; styles short; branches slender.

This tree differs from the foregoing, both in shape and manner of its growth; but it answers the essential characters thoroughly. It grows in the lowlands, like the other, and rises commonly to the height of eighteen or twenty feet. Its leaves are roundish and small, and the branches very slender.—Browne. Both these plants blossom in July and perfect their fruit in August. They are common near Clarendon Cross.

REED-MACE—See CAT'S-TAIL.

REED-MILLET—See PANIC-GRASS.

REEDS—See BAMBOO—PANIC-GRASS—TRUMPET-REED—WILD-CANE.

RHEXIA—See ACISANTHERA.

RICE.

RICE.

ORYZA.

CL. 6; OR. 2.—*Hexandria digynia*. NAT. OR.—*Gramina*.

GEN. CHAR.—Calyx a one-flowered, two-valved, glume, very small, acuminate, almost equal; corolla two-valved; valves boat-shaped, concave, compressed, the larger five-angled, awned; nectary two-leaved, flat on one side of the germ, very small, leaflets narrow at the base, truncate at the tip, caducous; stamens six filaments, capillary, the length of the corolla; anthers bifid at the base; the pistil has a turbinate germ, two capillary styles, reflex; stigmas club-shaped, feathered; there is no pericarp, corolla growing to the seed, oval-oblong, compressed, margins thin, two streaks on each side; seed single, large, oblong, blunt, compressed, with two streaks on each side. There is only one species.

SATIVA. COMMON.

Oryza. Sloane, v. 1, p. 103. *Culmo substriato nodoso, panicula sparsa*. Browne, p. 203.

Rice has the culm from one to six feet in length, annual, erect, simple, round, jointed; leaves subulate-linear, reflex, embracing, not fleshy; flowers in a terminating panicle; calycine leaflets lanceolate; valves of the corolla equal in length; the inner valve even, awnless; the outer twice as wide, four-grooved, hispid, awned; style single, two-parted. This valuable plant is cultivated largely both in India and America; but, though it thrives well in many parts of Jamaica, has been almost altogether neglected. The Chinese make a wine of it, which is of an amber colour, and tastes like Spanish wine; a strong brandy or spirit is also drawn from it. The flour of rice has lately been found a great corrector of damaged wheat flour, by mixing ten pounds of the latter with one of the former, to be made into bread in the usual manner.

This plant thrives extremely well in moist bottoms between the mountains. It ought only to be cultivated in places where the ground can be flooded with water. The marshy grounds therefore in this island, such as those at the Ferry, in St. Andrew's, the east end of St. Thomas in the East, the lands about Black-River in St. Elizabeth's, Negril in Westmorland, and other similar parts, appear naturally adapted to this grain, if it should be thought worth while to cultivate it, as an additional supply of food for the negroes.—*Long*, p. 768.

Rice grows as well in America as it doth in Africa and other parts. About twenty years past, I sowed some in a moist parcel of ground in Jamaica; but, happening to plant out of time, it grew very rank, and did not bear. I cut it down close to the ground, and gave it to my horses, who eat it as well as Guinea-corn blades. Afterwards it grew up, and, at the usual or proper time, it bore an extraordinary quantity of grain, which was bearded like barley, which with its outward husk is taken off, and then it is quite white. The Spaniards and Portuguese call it *arroz*, of which they make a spirit called arrack; the Arabians call it *arz*, and *arzi*. It is cooling and restringent; an emulsion made of it is good against the strangury from cantharides; the fine meal or flour takes away the marks of the small-pox.—*Barham*, p. 159.

RINGWORM

RINGWORM SHRUB.

CASSIA,

CL. 10, OR. 1.—*Decandria monogynia*. NAT. OR.—*Lomentaceæ*.

GEN. CHAR.—See Cane Piece Sensitive, p. 151.

ALATA. WINGED.

Siliquis quadrialatis, spicis terminalibus; foliis plurimis pinnatis, majoribus obovatis. Browne, p. 224.

Leaflets eight pairs, oval-oblong, the lowest smaller; petioles without glands; stipules spreading.

Stem sub-herbaceous, six feet high and more, branched, upright, furrowed, smooth, with simple striated branches; leaves large, from one to two feet in length, with six pairs of leaflets (six to ten); common petiole thickened at the base, three-sided, excavated at top, in a manner winged; leaflets gradually larger from the base to the tip, on very short petioles, ob-ovate, obtuse, entire, nerved, smooth on both sides, paler underneath, pubescent; glands none; stipules semi-cordate. Racemes terminating, spiked, from one to two feet in length, solitary, round, upright, many-flowered; flowers large, yellow, pedicelled; bractes roundish, ovate, concave, entire, the colour of the flowers, and covering them, loosely imbricate like scales; pedicels scattered, short, round, smooth; calycine leaflets oblong, concave, coloured, tender; petals unequal, with claws roundish, concave, entire; the superior fifth petal a little larger than the others, waved with a fringed border. The three lower filaments very small, with barren anthers; the four middle ones smaller and fertile; the two upper ones longer, with very large recurved anthers, bifid at the base, retuse at the tip; germ shortly pedicelled, long, declined, recurved, striated; style short, recurved; stigma obtuse; pods two-valved, quadrangular, the opposite angles winged, the margin crenate; seeds separated by alternate membranaceous partitions, rhomboidal, compressed.—*Sw.* This plant is a native of Jamaica, and common about the Ferry and in the upper parts of Sixteen-Mile-Walk. It lives but a few years, though it puts on the appearance of a shrub in its growth; and, when cultivated, rises sometimes to the height of seven or eight feet, but seldom exceeds four in its native soil. Ants are very fond of the flowers. The juice of the leaves or buds is said to cure ring-worms.—*Browne.* The most certain remedy which the West Indies afford for the cure of ring-worms, is an epithem made of the flour of brimstone and the juice of the ring-worm bush. But, though these applications will remove this ailment, yet the remedies which Europe affords are both more certain and more speedy. Among these, a strong solution of bluestone in lime-water, or corrosive sublimate, in the same menstruum, deserve the preference. Purgatives are scarce ever necessary in this disorder; but sweating, especially in a warm bath, is highly expedient at the close of the distemper. There are other remedies used as follow: by rubbing the parts with a coarse cloth, till they begin to bleed, and then squeezing into them the zest of a Seville orange: by mixing two drachms of gunpowder, with as much lime-juice as will bring it to the consistence of a thin liniment; this rubbed in morning and evening, after hard friction, often proves effectual. When the ring-worms are not numerous, an application of salt water and urine

urine will cure them.—*Grainger*. Dr. Wright says a poultice of the flowers of this shrub are also useful.

See CANE-PIECE SENSITIVE—CASSIA STICK TREE—HORSE CASSIA—SENNA—STINK-ING-WEED.

No English Name.

ROCHEFORTIA.

CL. 5, OR. 2.—*Pentandria digynia*.

NAT. OR.—*Dumosa*.

This was so named by Swartz in memory of de Rochefort, a traveller at the beginning of the seventeenth century.

GEN. CHAR.—Calyx a one-leafed, five-parted perianth; segments ovate, blunt; corolla one-petaled, funnel-form; tube short, aperture open, border five-parted, segments ovate-oblong, spreading; the stamens five filaments, inserted in the throat of the corolla at the openings, awl-shaped; anthers oblong; the pistil has a superior germ, roundish, compressed; styles two, awl-shaped; stigmas simple; pericarp sub-globular, two-celled; seeds a few, angular. Two species are natives of Jamaica.

1. CUNEATA. WEDGED.

Leaves wedge-shaped, ob-ovate, entire.

This is a shrub three or four feet high, with a branching, upright, unarmed, stem; branches sub-divided, flexuose, round, thorny, almost even, covered with an ash-coloured bark; thorns near the base of the petioles, solitary, stretched out, three times shorter than them; leaves in bundles or threes, seldom more, alternately clustered, on short petioles, sometimes emarginate, smooth on both sides, brownish green, paler underneath, slightly nerved, somewhat rigid; peduncles commonly terminating, axillary, sub-dichotomous, clustered, cymed, shorter than the leaves. Flowers small, greenish, or whitish; segments of the calyx upright, pubescent; tube of the corolla five-cornered; germ villose; styles shorter than the filaments, villose; stigmas villose, sub-plumose. Native of Jamaica, in dry rocky mountains.—*Sw*.

2. OVATA. OVATE.

Leaves ovate-emarginate.

This is a small tree with round smooth branches; leaves alternate, petioled, entire, somewhat villose, nerved, and veined, an inch long. Peduncles five times shorter than the leaves, many-flowered, with the flowers in pairs; calyx divided at the base; segments villose at the edge, upright, incumbent; tube of the corolla bell-shaped, the length of the calyx; segments blunt, a little longer than the tube; anthers large, sub-incumbent; germ smooth. Native of Jamaica.—*Sw*.

ROCOU—See ARNOTTO.

RODWOOD.

LÆTIA.

CL. 13, OR. 1.—*Polyandria monogynia*.

NAT. OR.—*Tiliaceæ*.

This

This was so named from John de Laet of Antwerp.

GEN. CHAR.—Calyx a five-leaved perianth; leaflets oblong, concave, reflex, coloured, withering; corolla none, or else five-petals; stamens numerous filaments, capillary, rather shorter than the calyx, with roundish anthers; the pistil has an oblong germ, ending in a filiform style, longer than the stamens; stigma headed; depressed; the pericarp a globose berry, three-sided, furrowed with three lines, one-celled, increased internally by a cartilaginous membrane; seeds very many, nestling, cornered, coated with a purple aril. Two species are natives of Jamaica.

1. GUIDONIA.

Foliis ovatis utrinque porrectis, alternis, quandoque crenatis; racemis laxis alaribus. Browne, p. 249, t. 29, f. 4.

Flowers apetalous; peduncles one-flowered, terminating; leaves oblong-acuminate, serrate, pubescent.

+ In the fruit of this tree, which seems nearly allied to *samyda*, the lines between the valves are of a beautiful red colour, as well as the placentæ; and the filaments of the flower very numerous. The tree grows to a considerable size, and is esteemed a fine timber-wood; it is much used in all sorts of buildings.

2. THAMNIA.

Foliis ovatis levissime crenatis late virentibus nitidis alternis, petiolis brevibus, pedunculis geniculatis. Browne, p. 245.

This shrub was found in the Red Hills above the Angels; it is not common in the island.—Browne.

+ In describing the characters of these two plants, Dr. Browne made them of a different genus, no doubt from having examined imperfect flowers, as the parts in these are very evanescent. In one flower examined, which was expanded, only two petals were found, and in another, not yet opened, three or four. The petals are equal in number to the leaves of the calyx, and equal in length to the filaments; they are placed in the divarication of the cup, of an ovate form, but shorter and narrower than the leaves of the perianth. Dr. Browne also observed the petals in one plant, and meeting with another after the petals had dropped, he named it *thamnia*: the corolla, indeed, is but seldom to be found after the flower opens, so much does nature sport with the fructification of plants, thereby causing many errors in botany, which add much to the difficulties of the science, and which nothing but time and the most careful industry can correct.

No English Name.

RONDELETIA.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT OR.—*Rubiaceæ.*

So named by Plumier in memory of Guillaume Rondelet, a famous physician and natural historian of Montpellier.

GEN. CHAR.—Calyx a one-leaved superior perianth, five-parted, acute, permanent; corolla one-petaled, funnel-shaped; tube cylindrical, longer than the calyx, bellying a little at top; border five-parted, from reflex flat; segments roundish; stamens

stamens five awl-shaped filaments, almost the length of the corolla; anthers simple; the pistil has a roundish inferior germ; a filiform style, the length of the corolla; and bifid stigma; the pericarp is a roundish capsule, crowned, two-celled; seeds several, or sometimes solitary. Ten species are natives of Jamaica.

With many seeds.

I. TRIFOLIATA. THREE-LEAVED.

Leaves in threes, tomentose underneath; panicles axillary.

This is an upright tree twelve feet in height. The younger branches are obtusely triangular and hirsute; leaves lanceolate-acute, quite entire, smooth on the upper, slightly tomentose on the lower, surface, three inches long, on hirsute petioles; stipules roundish, acuminate, in threes, alternating with the leaves. Racemes hirsute, unequal, branched, axillary, an inch and a half in length; flowers small, reddish, sessile and peduncled, void of scent; fruit two-valved, with a partition opposite the valves.—*Jacquin*, who observed it in Jamaica, flowering in February.

2. FILOSA. HAIRY.

Leaves ovate, hairy on both sides; peduncles axillary, shorter than the leaves, trifid; flowers four-stamened.

This is a shrub with round or four-cornered branches, leafy towards the top, and hairy below, even, ash-coloured, often warted with the old deciduous petioles; leaves opposite, two or three inches long, the upper or terminating ones clustered, ovate-lanceolate, entire, nerved, hairy, underneath rough-haired or tomentose-hairy; petioles short, villose; stipules between the petioles, sub-connate, acuminate, hairy.—Peduncles opposite, filiform, hairy, at the top trifid or three-flowered; the flowers pedicelled; the lateral pedicels half an inch long, the middle one shorter. Bractes two, awl-shaped at the base of the lateral pedicels, and two other at the base of the germ, shorter by half than the calyx; calyx four-parted, segments lanceolate-linear, acute, villose; corolla salver-shaped; tube sub-cylindrical, the length of the calycine segments, wider at top, on the outside villose or somewhat silky; border near the aperture crowned with a margined ring, four-parted, with the segments roundish, spreading, convex above, shorter than the tube; filaments four, very short, inserted in the tube above the middle; anthers oblong, linear, included; germ villose; style the length of the tube; segments of the stigma linear, blunt; capsule small, sub-globular, twin, villose, two-valved, with the partition contrary; seeds numerous, brown.—*Sw.*

With sub-solitary seeds.

3. THYRSOIDEA. THYRSED.

Leaves oblong, acute, membranaceous, pubescent underneath; thyrses axillary.

This is a small tree or shrub, six feet high, branched, upright, even, with an ash-coloured bark; branches simple, almost upright, long, spreading, round, or bluntly four-cornered, smooth; leaves opposite, decussated, three inches long, entire, nerved and veined, on petioles an inch long, striated, spreading; stipules between and above the petioles, pressed to the branchlet, wide, ovate, acute, smooth, rigid. Thyrses solitary, opposite, shorter than the leaves, oblong, spreading, on a common petiole,

an inch in length, angular, striated, smooth; branchlets opposite, decussated, subdivided; the outmost commonly three-flowered; flowers small, dull, whitish yellow or ferruginous; bractes small, awl-shaped, or little leaflets under the ramifications of the thyse; calyx very minute, five-toothed. Tube of the corolla elongated, cylindrical, swelling below the border, silky-pubescent on the outside; border five-parted; segments roundish, convex, distant, patulous, with a small ring contracting and crowning the aperture; filaments five, inserted into the upper part of the tube; anthers very small, ovate, pale, placed in the very aperture; germ roundish; style awl-shaped, bifid at the top; stigmas simple. Capsule roundish, with a groove along the middle, the size of a coriander seed, crowned with the very small calyx, two-celled; having two angular rounded striated seeds in each cell. Native of the driest hills of Jamaica, in the western part of the island, flowering in May; the flowers smell very sweet during the night.—Sw.

4. RACEMOSA. RACEMED.

Fruticosa, foliis ovatis verticillatim ternatis, stipulis rigidis interpositis, sustentaculis florum longis ramosis alaribus. Browne, p. 143, t. 2, f. 3. Petesia.

Leaves lanceolate-ovate, acuminate, smooth on both sides; stipules elliptic with a short point; racemes axillary, trichotomous patulous.

This is a shrub with round spreading branches, covered with an irregular hoary bark; branchlets four-cornered, compressed a little at the tip, smooth; leaves decussated, quite entire, scarcely nerved, veined, somewhat membranaceous; petioles longish, four-cornered, smooth; stipules interpetiolar, opposite, patulous, convex, wide, very minutely villose at the edge. Racemes solitary, opposite, from upright spreading, shorter than the leaves; common peduncle the length of the petioles, compressed; branches decussated, almost horizontal, with sessile, awl-shaped, spreading, bractes, every where at the sub-divisions of the raceme; flowers pedicelled, distinct, not clustered. Calyx small, with five very short upright teeth; corolla small, silky hoary on the outside, pale within; tube short, oblong, equal; border five-parted, segments ovate, spreading, pubescent; aperture naked, five-cornered; filaments from the middle of the tube; anthers oblong, yellowish, in the apertures of the tube; germ ovate, smooth; style simple, upright, the length of the tube; stigma thickish, with the apex more acute and undivided; capsule ovate, crowned with the calyx, smooth, two-celled? opening by two valves, two-seeded; seeds convex on one side, flat on the other, joined at the middle, distinct from the partition at the sides. Besides the ripening seeds there are other very minute embryos within the valves. Native of Jamaica on the mountains. It is allied both to *thyrsoides* and *laurifolia*, but differs in the leaves, spreading racemes, and flowers. Browne's figure agrees very well with this plant, but, in his specific character, he makes the leaves verticillate-ternate, whereas in his figure they are opposite; he also speaks of the flowers as four-stamened, which they very seldom are.—Sw. Browne found it near the water fall in Mammee River.

5. LAURIFOLIA. LAUREL-LEAFED.

Fruticosa foliis ovatis oppositis, stipulis rigidis interpositis, racemis minoribus alaribus, calice quinquesido. Browne, p. 143, t. 2, f. 2.

Leaves lanceolate-oblong, acute, smooth on both sides; stipules deltoid; racemes compound-axillary, erect; tube of the flowers very short.

This

This is a shrub with round, smooth, somewhat striated, branches, jointed as it were with the deciduous petioles, compressed a little at the top; leaves opposite, three or four inches long, decussated, acuminate at both ends, entire, nerved, and veined, paler underneath; on petioles an inch long, roundish, flat above, smooth; stipules between the petioles, wide, connate, acuminate, spreading, rigid, smooth, except at the edge, where they are villose. Racemes often the length of the leaves, opposite; branches decussated, compressed a little; pedicels scattered, the last commonly three-flowered; bractes minute, awl-shaped, at the divisions of the raceme. Flowers small, dusky yellow; calyx five-toothed, very small, pubescent; teeth acute, erect, very small; tube of the corolla very short, scarcely longer than the teeth of the calyx, wider under the border, which is five-parted, with the segments the length of the tube, oblong, reflex, tomentose above; throat open, with the margin five-cornered, smooth, shining; filaments from the middle of the tube, shorter than the tube; anthers in the throat, oblong, yellow; style thickish, the length of the tube; stigma above the border thickened, bifid; capsule globular, scarcely longer than a seed of hemp, smooth, crowned with a very minute calyx, two-celled, two-valved; partition contrary; seeds very many, membranaceous, but two only ripening, and these hemispherical. It is very like *R. thyrsoides*, but has the leaves a little narrower, and smooth on both sides; the racemes are erect; the tube is very short, not four times as long as the calyx, and two seeds only ripen in the capsule. It seems to be Browne's plant, though Linneus refers that to his *petesia stipularis*, which it can hardly be, because, in that case, the leaves ought to be tomentose underneath, and the flowers thyrsoid.—Sw.

6. TOMENTOSA. TOMENTOSE.

Fruticosa foliis sub-villosis ovatis oppositis, stipulis seta terminatis, racemis alaribus. Browne, p. 144.

Leaves ovate-acuminate, tomentose; peduncles three-parted, axillary, short.

This shrub is three feet high, upright, branched above, even; branches and branchlets opposite, round, upright, somewhat villose at the top; leaves on short pubescent petioles, opposite, entire, nerved and veined, rough-haired, dusky green, villose-tomentose underneath, becoming hoary; stipules between the petioles, ovate, with a short point, pubescent. Peduncles small, several times shorter than the leaves, three-parted, with three-flowered branchlets; flowers small, whitish or dusky yellow, villose on the outside; calyx five-toothed, small; tube of the corolla longer than the calyx, narrow; border five-parted, with ovate-concave segments; aperture crowned with a small ring; anthers within the aperture; style bifid at the top. Capsule roundish, two-celled, small, the size of coriander seed; seeds solitary, hemispherical. Native of Jamaica on rocky hills. It differs from *thyrsoides* in being smaller, in having the leaves pubescent on both sides, and tomentose underneath, and the racemes, flowers, and fruit, very small.

7. UMBELLULATA. SUB-UMBELLED.

Leaves lanceolate-ovate, acute, sub-hirsute; peduncles axillary, trichotomous at top; flowers sub-umbelled.

This shrub is two feet high and more, branched, and upright; branches almost upright, sub-divided, and compressed a little, even; branchlets hirsute at the top; leaves on hirsute petioles of a middling length; stipules between the petioles, opposite, connate,

nate, membranaceous; broad at the base, with a longer and somewhat bristly point, hirsute, shrivelling. Peduncles opposite, solitary, in the axils of the terminating leaves, shorter than the leaves, compressed, hirsute, at top three-parted, three-flowered; pedicels forming an umbellet, with four small linear acute leaflets, instead of an involucre, at the base; segments of the calyx linear, hirsute, permanent; corolla larger than the others, dusky yellow, pubescent on the outside; tube elongated, widening towards the border, which has five roundish convex segments; aperture crowned with a ring; filaments as in *thyrsoides*; style bifid at the top; capsule roundish, crowned with the segments of the calyx, two-celled, two-valved; valves bi-partite, partition contrary; seeds very many, but two ripening in each cell; these are angular convex; the rest are small, flat, and membranaceous. Native of Jamaica, on rocks near streams, flowering in April. It is distinguished by its shagginess, the size of the flowers, and the inflorescence.—Sw.

8. INCANA. HOARY.

Leaves ovate-lanceolate, underneath hoary-rugged; peduncles axillary, simple, three-flowered.

Shrub from two to three feet in height, upright, branched, rugged; branches round, rigid, rugged; leaves mostly terminating, on round tomentose-hoary petioles, opposite, entire, nerved, netted veined, smooth, somewhat shining, underneath hirsute, rugged, rigid, somewhat leathery; stipules within the base of the petioles, very short, truncate, whitish ciliate at the edge. Flowers sub-umbelled, on very short pedicels, with a two-leaved involucre; leaflets ovate-acute, concave, pubescent-hoary. Calyx five-parted; segments ovate, acute, thick, rigid, silky-hoary within and without; five other little segments at the base of the germ, and two ovate-acute leaflets at the base of the calyx; corolla biggish; tube the length of the calyx and hoary; border five-parted; segments ovate, convex, rigid, hoary; aperture margined; filaments from the middle of the tube; anthers below the border; germ oblong, truncate at the top, hirsute; style bifid at the top; stigmas thicker. Capsule oblong, clothed and crowned with the calyx, two-celled, truncate at the top, perforated in the centre, two-valved, with the valves bi-partite; partition contrary; seeds very many, small, oblong, membranaceous, two only ripening. This species is very distinct in its habit, flowers, and hoariness.—Native of Jamaica in rocky calcareous mountains, but rare.—Sw.

9. HIRSUTA. HIRSUTE.

Leaves oblong-acute, hirsute; peduncles axillary, trichotomous, loose; flowers hirsute.

This shrub is a fathom high, branched and even; branches sub-divided, round-flattened, loosish, rugged; twigs hirsute. Leaves on short hirsute, rufescent petioles, decussated, in the middle widish, acute, entire, nerved and veined, pale underneath; stipules opposite, wide, ovate-lanceolate, long, hirsute; peduncles opposite, solitary, nearly the length of the leaves, filiform, three-parted at top, trifid, hirsute. Flowers pedicelled, yellowish, hirsute on the outside; leaflets minute, opposite, linear, acute, hirsute, at the sub-divisions of the peduncles. Calyx five-cleft, segments lanceolate, acute, upright, hirsute; corolla salver-shaped; tube the length of the calyxine segments, round, narrower towards the border, hirsute on the outside; border five-cleft, spreading; segments oblong, blunt, short, incumbent; aperture contracted, scarcely margined; filaments inserted into the middle of the tube; anthers oblong, within the tube;

tube; germ ovate, hirsute; style the length of the tube, bifid at the top; stigmas erect, acute. Native of Jamaica, in mountains in the southern part, flowering in January.—Sw.

10. HIRTA. HAIRY.

Leaves oblong-acuminate, rough-haired, rigid, nerved underneath; peduncles axillary, trichotomous, erect.

This differs from the *hirsuta* in the leaves being rigid and nerved, the branches and peduncles stiff and upright, not loose: from *umbellulata* in the leaves not being lanceolate-ovate, acute; the flowers in umbels, not clustered.—Sw.

ROSE.

ROSA.

CL. 12, OR. 5.—*Icosandria polygynia*. NAT. OR.—*Lenticosæ*.

GEN. CHAR.—Calyx a one-leaved perianth, pitcher-shaped, five-cleft, fleshy, contracted at the neck; corolla five obcordate petals; stamens very many, capillary, with three-cornered anthers; the pistil has numerous germs, styles, and blunt stigmas; there is no pericarp; berry fleshy; seeds numerous, oblong, hispid, fastened to the inner side of the calyx.

ROSE.

The common rose, both red and white, has been long introduced into Jamaica, where it thrives very well, especially in the cooler mountains, and, with little care, may be kept constantly in bloom. The flowers are never so large, nor the smell so powerful and fragrant, as in England; owing to the heat of the climate disclosing them too soon. There are so many species and varieties of this well known and beautiful genus, that it is difficult to distinguish them. The following are enumerated in the Hortus Eastensis: *lutea*, yellow Austrian; *cinnamomea*, cinnamon; *centifolia*, hundred leaved; *damascena*, damask; *gallica*, red; *moscosa*, moss; *moschata*, musk; *alba*, white; *spinosissima*, Scotch; *semperflorens*, China; and *rubiginosa*, sweet brier.

ROSE, WILD.

BLAKEA.

CL. 11, OR. 1.—*Dodecandria monogynia*. NAT. OR.—

This was so named by Dr. Patrick Browne from Mr. Martin Blake, of Antigua, a great promoter of useful knowledge, and a patron of the doctor's Natural History of Jamaica.

GEN. CHAR.—Calyx—perianth of the fruit inferior, six-leaved; leaflets ovate, concave, expanding, the size of the flower; perianth of the flower superior; margin quite entire, hexangular, membranaceous; corolla six, ovate, expanding, equal petals; stamens twelve filaments, subulate, erect; anthers triangular, depressed, concatenated into a ring; the pistil has an inferior germ, ob-ovate, crowned with the margin of the calyx; style subulate, the length of the flower; stigma acute; the pericarp an ob-ovate capsule, six-celled; seeds very many. One species is a native of Jamaica.

TRINERVIA. THREE-NERVED.

Fruticosa; foliis ellipticis, trinerviis, nitidis; floribus lateralibus.—
Browne, p. 323, t. 35.

Two calyced; leaves three-nerved.

Leaves oblong-ovate, petioled, quite entire, coriaceous, opposite; the three nerves underneath protuberant, blackish. Flowers opposite, solitary.

This vegetable is certainly one of the most beautiful productions of America. It is but a weakly plant at first, and supports itself for a time by the help of some neighbouring shrub or tree; but it grows gradually more robust, and, at length, acquires a pretty moderate stem, which divides into a thousand weakly declining branches, well supplied with beautiful rosy blossoms on all sides, that give it a most pleasing appearance in the season.

It is chiefly found in cool, moist, and shady, places, and grows generally to the height of ten or fourteen feet; but rises always higher when it remains a climber, in which state it continues sometime. It thrives best on the sides of ponds or rivulets, and those that would choose to have it flourish in their gardens, where it must naturally make a very elegant appearance, ought to supply it with some support while it continues young and weakly. It is called *Blakea*, after Mr. Martin Blake, of Antigua, a great promoter of every sort of useful knowledge, and a gentleman to whose friendship the Natural History of Jamaica chiefly owes its early appearance.—*Browne's Jamaica*.

The petals of the flower have an agreeable acid taste, hence some have called this plant the *sorrel rose*.

“ I have always taken the twelve triangulated bodies, supported by the stamens in this flower, to be anthers; but having discovered an uncommon appearance upon the upper part of some of these supposed anthers with my naked eye, it induced me to look at it with a hand microscope, when I perceived that the upper part or coat of some of these, being abraded by some accident, displayed two small anthers, and that these bodies ought rather to be denominated nectareous glands than anthers, on the summit of the other glands that were not abraded; I could also plainly perceive the tumid anthers replete with yellow farina, and on these, as well as the abraded ones, I saw two small holes or punctures on the interior side of each angle of the glands, facing the style, immediately before the inner angle; and, perceiving a furrow at the hinder part of each gland, with a pin I found I could easily divide each gland into two equal parts, which were connected above, where each division had an hollow or excavated part for the reception of one anther, which was recumbent and fixed; the lower part of each glandular division was hollow, monocapsular, and empty.”—*A Robinson*.

ROSE APPLE.

EUGENIA.

CL. 12, OR. 1.—*Icosandria monogynia*. NAT. OR.—*Hesperideæ*.

This was so named after Prince Eugene of Savoy, who was a great promoter of botany.

GEN. CHAR.—Calyx a one-leaved perianth, superior, elevated in the middle into a sub-villose little ball, four-parted; divisions oblong, obtuse, concave, permanent; corolla

corolla four petals, twice as large as the calyx, oblong, obtuse, concave; stamens very many filaments, inserted into the ball of the calyx, length of the corolla, with small anthers; the pistil has a turbinate inferior germ; a simple style, the length of the stamens; and a simple stigma; the pericarp a four-cornered drupe, crowned, one-celled; seed a roundish smooth nut.

JAMBOS.

Leaves quite entire; peduncles branched, terminating.

This tree rises twenty or thirty feet high, with handsome spreading branches. Leaves lanceolate, acute, opposite. Flowers mostly terminating, but some come out from the sides. Fruit round, smooth, crowned with the calyx, of a fine yellow colour when ripe, about two inches in diameter: the rind about a quarter of an inch thick, hollow, containing a roundish nut, which rattles in the fruit when ripe. The rind has a sweetish watery taste, with a flavour like roses, from which the name has been derived; but is not in much esteem as a fruit. This tree is a native of the East Indies, and was introduced into Jamaica in the year 1762, by Zachary Bayley, Esq. and is so hardy as to thrive well in almost any soil, multiplying itself so much by scattering its seeds, that, wherever there is a bearing tree, the surrounding land will be covered with young plants, very troublesome in some situations, as the seeds take root and grow very speedily.

The *malacensis*, or Otaheite apple; and the *jambolana*, or jambolan, both species of this genus, were also brought to Jamaica in his Majesty's ship Providence, in the year 1793.

ROSEMARY.

ROSMARINUS.

CL. 2, OR. 1.—*Diandria monogynia*. NAT. OR.—*Verticillatæ*.

GEN. CHAR.—Calyx a one-leafed perianth; corolla unequal, with the upper lip two parted; stamens two long filaments, curved, simple, with a tooth; anthers simple; the pistil has a four-cleft germ; style like the stamens, stigma simple; no pericarp; calyx containing the seeds, which are four, ovate.

OFFICINALIS. OFFICINAL.

Leaves sessile.

This well known plant has been long cultivated in Jamaica, but does not thrive so well as some other European plants, though sufficiently to supply enough for common uses. It has a fragrant smell, and a warm pungent bitterish taste, and considered a good ingredient in discutient baths.

ROSEMARY, WILD—See WILD ROSEMARY.
ROSEWOOD—See CANDLE-WOOD.

No English Name.

ROTTBOELLIA.

CL. 3, OR. 1.—*Polygamia monoecia*. NAT. OR.—*Gramina*.

GEN.

GEN. CHAR. — Rachis jointed, roundish, filiform; calyx ovate-lanceolate, flat, one or two-valved; florets alternate, on a flexuose rachis. Swartz found one species of this grass in Jamaica.

EXALTATA.

EXALTED.

Spike round, filiform, floscular every way; glumes ovate, blunt; sheaths dotted and hirsute.

Culm from two to six feet high, upright, sub-divided, striated, semi-cylindrical, sheathed, branchlets upright; leaves a foot long, broad-linear, spreading, even, cartilaginous serrate at the edge; sheaths two or three inches in length, striated, dotted, hispid-hirsute, rough-haired at the mouth; hairiness thin, white, pungent. Spikes solitary, two or three inches long, cylindrical, jointed, acuminate, even, green; florets sessile, alternate; rachis flexuose, with excavations for the florets, which form a round spike. The exterior flowers are male, the interior hermaphrodite, within the same calycine glumes. Glume two-valved, two-flowered; outer valve ovate-acute, pressed close to the spike; inner arched, involving the hermaphrodite flower. Corolla of the male flower two-valved, valves smaller, white; the nectary consists of two truncate petals at the base of the filaments. Anthers red, fertile, they are often barren and then are yellow; no pistil. Hermaphrodite within the male, and not visible unless that be removed: the corolla of the hermaphrodite is also two-valved; the valves whitish and fugacious; anthers often barren; germ roundish; stigma villose, purple. After the male flower falls, the seed ripens within the rachis, and, when ripe, falls off, the spike breaking. — Sw.

RUE.

RUTA.

CL. 10; OR. 1. — *Decandria monogynia*. NAT. OR. — *Multisiliqua*.

GEN. CHAR. — Calyx a five-parted perianth; corolla five concave petals; stamens ten awl-shaped filaments; anthers erect; pistil a gibbous germ crossed, surrounded by honey dots; style erect; stigma simple; receptacle surrounded by ten honey dots; the pericarp a gibbous five-lobed capsule; seeds very many, rugged.

GRAVEOLENS.

Leaves super-decompound; leaflets oblong, the end one ob-ovate; petals quite entire.

The common or garden rue has been cultivated in Jamaica, with success, for more than a century past; frequently rising to the height of five or six feet. The lobes of the leaves are wedge-shaped, of a grey colour, and strong odour. The flowers are produced at the ends of the branches, in the form almost of umbels, they are composed of four yellowish petals, cut on their edges, and only eight stamens, the centre flower of the umbel having generally five petals and ten stamens.

Rue has a strong ungrateful smell, and a bitterish penetrating taste: the leaves, when full of vigour, are extremely acid, insomuch as to inflame and blister the skin, if much handled. With regard to their medicinal virtues, they are powerfully stimulating, attenuating, and detergent; and hence, in cold phlegmatic habits, they quicken the

the circulation, dissolve tenacious juices, open obstructions of the excretory glands, and promote the fluid secretions. The writers on the *Materia Medica* in general have entertained a very high opinion of the virtues of this plant. Boerhaave is full of its praises; particularly of the essential oil, and the distilled water cohobated or re-distilled several times from fresh parcels of the herb. After extravagantly commending other waters prepared in this manner, he adds, with regard to that of rue, that the greatest commendations he can bestow upon it fall short of its merit: "What medicine (says he) can be more efficacious for promoting sweat and perspiration, for the cure of the hysteric passion and of epilepsies, and for expelling poison?" Whatever service rue may be of in the two last cases, it undoubtedly has its use in the others: the cohobated water, however, is not the most efficacious preparation of it. An extract made of rectified spirit contains in a small compass the whole virtues of the rue; this menstruum taking up by infusion all the pungency and flavour of the plant, and elevating nothing in distillation. With water, its peculiar flavour and warmth arise; the bitterness, and a considerable share of the pungency, remaining behind.

"Rue is of excellent use for all illnesses of the stomach that proceed from cold or moist humours; a great digester and restorer of appetite; dispels wind, helps perspiration, drives out ill humours, useful in pestilent or contagious airs. The only ill lies in too frequent use, which impairs the natural heat of the stomach, by the greater heat of an herb very hot and dry; and therefore the juice made up with sugar into small pills, and swallowed only two or three at nights or mornings, and only where there is occasion, is the most innocent way of using it."—*Sir W. Temple on Health and Long Life.*

RUNNING GRASS.

PASPALUM.

CL. 3, OR. 2.—*Triandria digynia.*

NAT. OR.—*Graminæ.*

GEN. CHAR.—Calyx a one-flowered two-valved glume, membranaceous; valves equal, orbicular, plano-concave; inner flatter, placed outwardly; corolla two-valved, the size of the calyx; valves roundish, cartilaginous, outwardly convex, inflex at the base; stamens three capillary filaments, the length of the glume, with ovate anthers; the pistil has a roundish germ; two capillary styles, the length of the flower; stigmas pencil-form, hairy, coloured; there is no pericarp; glumes permanent, closed, growing to the seed, which is single, roundish, compressed, convex on one side. Seven species of this genus have been found in Jamaica.

1. BICORNE.

TWO-HORNED.

Gramen dactylon bicornè repens, foliis latis brevibus. Sloane, v. I, p. 112. *Bicornè repens spicis tenuioribus et longioribus.* Browne, p. 136.

Spikes two, almost erect, one of them sessile; florets oblong, smooth; culm ascending.

The mountain running grass is the most common sort of grass in the midland mountains, and grows frequently in the lowlands. It is a little sourish, and not liked by any sort of brutes when green, but, when cut and well cured, it makes excellent hay, and

agrees extremely well with all labouring and stabled cattle. This discovery is owing to Mr. Wallen, who had frequently tried the experiment before I left Jamaica, and has always found it answer beyond his expectations. He is a gentleman of a very happy turn of thought, and a great promoter of every sort of curious and useful industry.—*Browne.*

2. DISTICHUM. TWO-SPIKED.

Gramen dactylon bicornis spicis purpurascens majus. Sloane, v. 1, p. 112, t. 65, f. 3.

Spikes two, almost erect, one of them sessile; florets oblong, smooth; culm ascending.

Culm simple, decumbent towards the root; leaves lanceolate-acute, flat, short; sheaths striated, hairy at the base. Spikes almost four-cornered, one shortly pedicelled; rachis flat, even; florets approximating, alternate, sub-sessile, ovate, acute. Glumes both of the calyx and corolla equal, ovate, striated; filaments longer; anthers very dark blue; stigmas penciled blue.—*Sw.* This has a crooked repent stem, the flower stalk fourteen inches high, with purple blackish stamens. It grows in holes and places where water has stood in the savannas.—*Sloane.*

3. VIRGATUM. ROD-LIKE.

Gramen dactylon majus, panicula longa, spicis plurimis nudis crassis. Sloane, v. 1, p. 112, t. 69, f. 2.

Spikelets panicled alternate, villose at the base; flowers in pairs.

The root is thickly fibrose and perennial, and throws up several annual erect stems, of about four feet high, and thicker than a quill at the base, round, glossy, and in part covered by the sheaths of the leaves, which are seated at the joints of the stems, and are smooth on both sides, and hispid in a retroverted direction on the borders, they are about two and a half feet long, with a sheath almost a foot long, and about an inch wide. The spikes are alternate at the top of the stem, very spreading, shortly foot-stalked, hairy at their origin, and about four inches long, in number uncertain, from four to twelve. The shaft or mid-rib of the spike is flat, membranaceous, and smooth, green. The flowers are obversely-ovate, very compressed, and marked on each side by a longitudinal nerve. The glumes of the calyx are villose at their tips on the borders, the anthers are oblong, hastated and incumbent, and of a dingy yellow; the stigmas purplish; the seeds glossy and brownish.—*Sw.* This grows in savannas plentifully.

4. PANICULATUM. PANICLED.

Gramen miliaceum, panicula viridi, vel purpurea. Sloane, v. 1, p. 115, t. 72, f. 2.

Spikes panicled, verticillate aggregate.

This is an annual grass, with the panicle as it were in whorls, with very numerous, linear, filiform, very narrow spikelets, all directed one way; the flowers are digested in a double row, and are sharpish.—*Linneus.* Culm a foot high, jointed; leaves nine inches long, sheath rough; panicle three inches long, purple or green. It grows in clayey moist grounds. *Sloane.*

5. VAGINATUM.

5. VAGINATUM. SHEATHED.

Spikes two; spikelets bifarious, acuminate; culm branched; knee jointed; joints sheathed.

This is a foot high; roots numerous, filiform; culm creeping, sheathed at the joints; sheaths distich, compressed, wide, striated, smooth; leaves lanceolate-linear, acute, spreading, hairy at the neck of the sheath; spikes spreading, an inch long, pedicelled; rachis linear, sub-flexuose; spikelets ovate, plano-convex, on very short pedicels.— Calycine glumes equal, ovate, acute, smooth; corolla scarcely smaller; anthers and stigmas purple. It is known by its branching culm, by its sheaths and spikelets.— Native of Jamaica, in pastures where the soil is clay.—Sw.

6. DECUMBENS. PROSTRATE.

Spike single, directed one way; peduncles very long; spikelets alternate, orbiculate-acuminate, smooth; culm procumbent.

This is a procumbent grass scarcely a foot in length: culm branched, divaricating, round, smooth; leaves widish, lanceolate, pubescent on both sides, with the edge sub-ciliate; sheaths the length of the leaves, even, villose at the neck. Peduncles from the sheaths, solitary, from four to six inches long, loose, one-spiked; spikes nodding, an inch long; spikelets directed one way, on short pedicels; rachis membranaceous, linear, flat; calycine glumes ovate, smooth; corolline very like them; anthers pale, stigmas long, pencilled. This differs from its congeners, in its divaricating diffused culm, and solitary axillary-spike, on a long pedicel. Native of Jamaica on the western side of the island, on the mountains, in a dry sandy soil.—Sw.

7. FILIFORME. FILIFORM.

Spike mostly solitary, linear-one-rowed; spikelets alternate, ovate-compressed; culm and leaves filiform.

Culm erect, simple, with blackish joints; leaves half round.—Sw.

RUPTURE-WORT, HAIRY.

ILLECEBRUM.

CL. 5, OR. 1.—*Pentandria monogynia*.

NAT. OR.—*Holoraceæ*.

GEN. CHAR.—Calyx a five-leaved perianth, cartilaginous, five-cornered; with coloured leaflets, which are sharp, with distant points, permanent; corolla none; stamens five capillary filaments, within the calyx, with simple anthers; the pistil has an ovate germ, sharp, ending in a short bifid style; stigma simple, obtuse; pericarp a roundish capsule, acuminate, both ways five-valved, one-celled, covered by the calyx; seed single, roundish, sharp on both sides, very large. Two species are natives of Jamaica.

1. POLYGONOIDES. POLYGONUM-LIKE.

Amaranthoides humile currassavicum foliis polygoni. Sloane, v. 1, p. 141, t. 86, f. 2. *Hirsuta repens ad nodos alternos florida, foliis ovatis, petiolis marginatis semi-amplexantibus, floribus confertis sessilibus*. Browne, p. 184.

Stems creeping, rough-haired; leaves broad-lanceolate, petioled; heads orbiculate, naked.

Stem round, reddish, hairy all over, dichotomous, creeping over the earth, in tufts, for some feet; almost every joint sending forth roots. Leaves opposite, quite entire, even, hairy underneath, smooth above, veined, acute, ending at the base in petioles the length of the leaf, and somewhat hairy. Flowers axillary, white, and under them a three-leaved bracte shorter than the flower; filaments simple, shorter than the corolla; germ compressed. This plant is found creeping in all the savannas about Kingston and Spanish Town.

2. VERMICULATUM. WORM.

Amaranthoides humile curassavicum foliis cepeæ lucidis, capitulis albis. Sloane, v. 1, p. 141. *Repens rufescens, foliis linearibus crassiusculis, capitulis alaribus.* Browne, p. 184.

Stems creeping, smooth; leaves sub-cylindric, fleshy; heads oblong, smooth, terminating.

From the root is scattered on every hand a great many trailing branches, about a foot long, round, red, jointed, smooth, small, and having branches set opposite to one another at every joint. Leaves almost round, green, one-third of an inch long, opposite. At the ends of the branches come the flowers, being set in a head close together, each of them being long, tubulous, yellow within, and white above. It grew near the sea side. Piso says it has somewhat the qualities of samphire, the short branches and leaves, a little boiled, and covered with vinegar, being eaten as a pickle, he says, open obstructions, and excites the appetite.—*Sloane*. Browne calls it the creeping *gomphrena*, common about Rock River, and spreading a great way among the grass, rooting at every joint; the whole having a reddish brown cast, and something like purslane. Swartz also places this plant among the *gomphrenas*, on account of its having commonly two styles, a two or three-leaved calyx, with a nectary and lanugo between the calyx and corolla.

RUSHES:

SCIRPUS.

CL. 3, OR. 1.—*Triandria monogynia.* NAT. OR.—*Calamariæ.*

GEN. CHAR.—Calyx—spike imbricate all round; scales ovate, from flat, bent in, distinguishing the flowers; no corolla; stamens three filaments, finally becoming longer, with oblong anthers; the pistil has a very small germ; a filiform long style; three capillary stigmas; no pericarp; seed one, three-sided, acuminate, surrounded with villose hairs, shorter than the calyx, or without any. Seven species have been discovered in Jamaica.

With a single spike.

1. MUTATUS. CHANGED.

Culmo triquetro nudo, spica stricta oblonga, terminali. Browne, p. 126. S. 4.

Culm three-sided, naked; spike cylindrical, terminating.

The

The *aphyllous scirpus*, with a triangular stalk, is frequent in all the standing shallow waters in Jamaica, especially to the east and west of Kingston; the stalks are almost hollow, and partitioned by frequent transverse septæ.—*Browne*. It resembles the following species very much, but the culm is three-sided, softish, and not geniculated. *Linneus*.

2. GENICULATUS. KNEE-JOINTED.

Juncus aquaticus geniculatus, capitulis equiseti, major. Sloane, v. 1, p. 121, t. 81, f. 3, and t. 75, f. 2. *Major rotundus, panicula terminali, spicillis compressis pedunculis tenuioribus et longioribus incidentibus.* Browne, p. 127. S. 5.

Culm round, naked; spike oblong, terminating.

Culms five or six, from two to three feet high, of a fine shining green colour, hollow, with many transverse membranes; geniculated, with no pith. Head oblong, scaly, white. It varies in size, and is found in holes of the lowlands where water has stood.—*Sloane*. Browne calls it the flat paniced bull-rush, and says it is very like the common bull-rush.

3. CAPITATUS. HEADED.

Culmo rotundo nudo; spica stricta oblonga terminali. Browne, p. 126. S. 3.

Culm round, naked, bristle-form; spike sub-globular, terminating.

Browne calls this the *aphyllous round-shanked scirpus*, which, with the first species, is to be found in all shallow standing waters.

With round culms and several spikes.

4. LACUSTRIS. LAKE.

Juncus lœvis. Sloane, v. 1, p. 122. *Major rotundus, panicula terminali, spicillis compressis pedunculis tenuioribus et longioribus incidentibus.* Browne, p. 127.

Culm round, naked; panicle cymed, decomposed, terminating; spikelets ovate.

Roots creeping under water horizontally, thick, and strong: stems straight, four or five feet, or much more, in height, naked, round, smooth, dark green, very spongy, and full of watery juice within, with several alternate sheathing scales at the base.—Panicle decomposed, in a cyme-like form; its branches are very unequal, compressed, and fringed towards their extremities: bractes two exterior, lanceolate, acute, sheathing, commonly shorter than the panicle, and many interior ones, which are smaller; spikes clustered (generally two or three together), ovate, brown, with a shining rusty tinge; glumes concave, keeled, pointed, fringed, sometimes cloven, but with a serrated point in the cleft; stamens not very long; stigma three-cleft; seed flat on one side, convex on the other, with five or six short rough bristles at its base.—*Smith*. This grows commonly about the Ferry, and about the banks of rivers, as well as in lagoons. It is used in England as well as in Jamaica for making bottoms to chairs, and for thatching cottages, being of a soft pliant nature, and destitute of the roughness or cutting edges of many grass-like plants. In hard seasons cattle will eat it.

5. AUTUMNALIS.

5. AUTUMNALIS.

Culm ancipital, naked; umbel decomposed; spikelets ovate.

Leaves radical, grassy, loose, somewhat rugged, often the length of the culms, which are a hand high, compressed, keeled a little on one side. Involucre terminating, two-leaved, like the leaves, commonly longer than the umbel; which is spreading and unequal. The peduncles have generally three spikes. Scales ovate, ferruginous, with a green keel, scarcely mucronate.—*Linneus*.

Culm three-sided; panicle naked.

6. FERRUGINEUS. IRON.

Gramen cyperoides majus, spicis ex oblongo rotundis, compactis ferrugineis. Sloane, v. 1, p. 118, t. 77, f. 2.

Culm three-sided, almost naked; involucres length of the panicle and ciliate.

This species varies remarkably from a span to two feet in height; and is easily distinguished by its unequal ciliate involucre. It grows both in dry and wet situations.

7. SPADICEUS. SPADIX.

Gramen cyperoides majus aquaticum, paniculis plurimis junceis sparsis, spicis ex oblongo rotundis spadiceis. Sloane, v. 1, p. 118, t. 76, f. 2.

Culm three-sided, naked; umbel almost naked; spikes oblong, sessile, and terminating.

Culms two feet high, erect, slender, striated, smooth, convex on one side, flattish on the other, with the angles rugged backwards; leaves narrow, smooth, shorter than the culm; umbel terminating, compound: universal one with eight or nine unequal rays, an inch longer or shorter. Universal involucre three or four-leaved, with a leaflet equal to the longer rays, the rest an inch in length, or less, rugged as before, and channelled; the two opposite exterior ones larger, brown at the base; partial involucre two or three-leaved. Spikes three on each ray of the partial umbel, oblong, finally cylindrical, sharpish, imbricate, brown, and shining; the middle one sessile; scales oblong, blunt, convex, concave, keeled at the tip; the keel running out into an obscure point.—*Vahl*.

SABACA

SABACA—See AVOCADO PEAR.

SAFFRON, BASTARD—See BASTARD SAFFRON.

SAGE.

SALVIA.

CL. 2, OR. 1.—*Diandria monogynia.* NAT. OR.—*Verticillatae.*

This generic name is derived from the Latin word *salvere*, on account of its healing qualities.

GEN. CHAR.—Calyx a one-leaved tubular perianth, with a two-lipped mouth; corolla one-petaled, unequal; stamens two filaments, very short, fastened transversely to a pedicel; the pistil has a four-cleft germ, a filiform style, and bifid stigma; there is no pericarp; calyx slightly converging, having the seeds in its bottom, which are four, and roundish. Two species are indigenous to Jamaica, and the *officinalis*, or garden sage, has been introduced.

1. OFFICINALIS. OFFICINAL.

Leaves lanceolate-ovate, crenulate; whorls few-flowered; calyxes mucronate.

The common garden sage is a branching shrub, about two feet in height, and, since its introduction, has thriven well in Jamaica.

Sage has a strong fragrant smell, and a warm bitterish aromatic taste; formerly in great repute, but at present considered of but little importance. Van Swieten found it efficacious in stopping night sweats infused in wine or spirit, and a strong infusion in water has been found equally successful. Van Swieten also found it proper for restraining the flow of milk in the breasts of women, after they had weaned their children. It proves of service in debility of stomach, and has a power of resisting putrefaction, having considerable antiseptic virtues. It is used in sauce for strong meats.

2. OCCIDENTALIS. WESTERN.

Spicata repens, melissæ minori folio, floribus fasciculatis alternis.—
Browne, p. 117.

Leaves ovate-serrate; spikes loose; bractes cordate, sub-triflorous.

Root fibrous, annual; stem ascending, branched, a foot high, diffused, knotty, even; leaves shortly acuminate, hispid above, smooth beneath; petioles four-cornered, red, pubescent; bractes opposite, alternate, awned; within them two or three small blue flowers. Calyx angular, striated, covered with glandular hairs; style the length of the upper lip; seeds two, one of which only ripens, and that is ovate, compressed, and black. It differs from the other species in loose spikes and remote flowers. Sw. Browne calls it the *creeping sweet-scented sage*, which he says is found creeping under every hedge and bush in the lowlands, running frequently the length of two or three feet, always rooting at the lower joints; it has a faint smell of balm when first pulled, and may be naturally substituted in the room of that plant, though it is not so strong a cephalic.

3. TENELLA.

3. TENELLA. TENDER.

Leaves cordate; stem filiform, creeping; spikes ascending.

This is an herbaceous annual plant, with long, capillary, creeping, roots; stem decumbent, four or five inches long, the lower part creeping, sub-divided, ascending, striated, pubescent; leaves small, petioled, remote, tooth-serrate, nerved, pubescent. Spikes terminating, upright, composed of approximating three or four-flowered whorls; flowers pedicelled, small, blue; bractes ovate, very small, two, three, or four, under the peduncles. Calyx gibbous underneath, three-toothed; upper segment shorter, retuse, very minutely three-toothed; the two anterior ones a little longer, blunt; all hirsute with glandular hairs; glands pellucid, azure. Lower lip of the corolla white in the middle, blue at the edge; the opening with blue lines; seeds two, naked, erect, ovate, compressed, black. It is easily known by its habit and smallness, and flowers all the year. Native of Jamaica, in gravelly and grassy parts of the highest mountains.—*Sw.*

SAGE, WILD—See WILD SAGE.

SAGO—See CABBAGE-TREE.

SALOP—See JAMAICA SALOP.

SALT-WORT.

SALICORNIA.

CL. 1.—OR. 1.—*Monandria monogynia.* NAT. OR.—*Holoraceæ.*

GEN. CHAR.—Calyx four-cornered, truncate, ventricose, permanent; no corolla; stamen one filament (or two), simple, longer than the calyx; anther one, oblong, twin, erect; the pistil has an ovate-oblong germ; style simple, under the stamen; stigma bifid; there is no pericarp; calyx ventricose, inflated; seed single. One species has been found in Jamaica.

HERBACEA. HERBACEOUS.

Aphylla ramosa, ramis in spicas abeuntibus longas annulatim areolatas.
Browne, p. 112.

Joints compressed, emarginate, internodes ob-conical; spikes peduncled, attenuated towards the top.

Root fibrous, small, annual, or biennial; stem for the most part upright, sub-divided at the base, branched at top; branches opposite, simple, upright, very succulent, leafless, jointed; joints flattened, widening at the end, emarginate: spikes opposite, with one at the end larger than the rest, peduncled, round, gradually attenuated towards the top, sharpish, jointed: flowers opposite, near together, mostly three on each side in the clefts of the joint—*Smith.* These plants are also called *marsh samphire* and *glass-wort*, as from their ashes a fossil alkali is obtained, in great request for making soap and glass. Browne says this plant is found in great abundance in the Burrough in St. James's. It grows in the low salina near the sea, and seldom is above eight or eleven inches above the ground; it has but one stamen to every style. The whole plant abounds with a neutro-muriatic salt.

No

No English Name.

SAMARA.

CL. 4, OR. 1.—*Tetrandria monogynia*. NAT. OR.—*Rhamni*.

GEN. CHAR.—Calyx a very small perianth, four-parted, acute, permanent; corolla four-ovate sessile petals, with a longitudinal pit at the base; stamens four awl-shaped filaments, immersed in the pit, long; anthers oblong; the pistil has an ovate germ, style longer, stigma funnel-form; pericarp a roundish one-seeded drupe; seed solitary. One species was found in Jamaica by Swartz.

CORIACEA.

CORIACEOUS.

Flowers sessile, conglomerate; leaves lanceolate-ovate, acute, sub-coriaceous. This is a tree with a trunk from twenty to thirty feet in height, and upright branches; branchlets alternate, sometimes four-cornered, even; leaves alternate, scattered, quite entire, somewhat rigid, nerved and veined, very smooth, membranaceous, dark green, on short petioles. Flowers lateral and axillary, small, whitish, balls of flowers scattered, approximating; calyx four-leaved, or four-parted at the base; leaflets ovate, acute, keeled, scarcely half a line in length, a little connate at bottom; petals four, slightly connected at the base, oblong, sharpish, spreading, three times as long as the calyx; filaments very short, inserted into the base of the petals; anthers oblong, spreading, pressed close to the segments of the corolla, biggish; germ superior, globular, style very short, stigma large, ovate: Berry? globular, the size of a peppercorn, one-celled. Some of the trees of this species have male flowers only. Native of Jamaica, in the southern parts, in woods on the mountains.—Sw.

SAMPHIRE OF JAMAICA.

BATIS.

CL. 22, OR. 4.—*Dioecia tetrandria*. NAT. OR.—

GEN. CHAR.—Male calyx a pyramidal ament, scales one-flowered, fourfold, imbricate; no corolla; stamens four filaments, erect, longer than the scales of the ament; anthers oblong, twin, incumbent. Female on a separate plant—calyx a common fleshy ament, containing some floscules, conglobated into an ovate quadrangular body; involucre two-leaved; no corolla; the pistil has a quadrangular germ, fastened to the ament; no style; stigma two-lobed, obtuse, villose; the pericarp, a berry conjoined with the rest, one celled; seeds four, triangular, acuminate. There is only one species, a native of Jamaica.

MARITIMA.

MARITIME.

Kali fruticosum, coniferum, flore albo. Sloane, v. 1, p. 144.
Maritima erecta, ramosa; foliolis succulentis, sub-cylindricis. Browne, p. 356.

This is a shrub, four feet high, or less, with brittle, round, ash-coloured, stems, much branched, diffused, procumbent; young branches four-cornered, four-furrowed, green, opposite, and upright. Leaves oblong, thicker above, acute, gradually drawing to a point towards the base, fleshy, succulent, flat above, convex beneath, sessile, opposite, scarcely an inch long, numerous. Stigmas white, flowers yellow, or greenish.

ish yellow. The whole plant is very salt to the taste, and is burned for barilla at Carthage. It is very common on all the salt marshes on the south side of Jamaica. It would be very useful in the manufacture of soap and glass, were such things attended to in this island, as well as the salt-wort before described, the sea-side purslane, and many other plants.

SAND-BOX TREE.

HURA.

CL. 21, OR. 8.—*Monoecia monodelphia.* NAT. OR.—*Tricoccæ.*

GEN. CHAR.—Male calyx—Ament from the divarication of the branches, oblong, drooping, covered with sessile spreading florets, scales oblong; perianth within each scale of the ament, cylindric, two-leaved, truncate, very short; corolla none; stamen a cylindric filament, a little longer than the calyx, peltate at the tip, rigid, below the tip twice or thrice verticilled with tubercles; anthers two, immersed in each tubercle, oval, bifid. Female flower in the same plant—Calyx—perianth one-leaved, cylindric, furrowed, truncate, quite entire, closely surrounding the germ; corolla none; the pistil has a roundish germ within the calyx; a cylindric long style; stigma large, funnel-shaped, plano-convex, coloured, twelve-cleft, blunt, equal; pericarp woody, orbiculate or globular-flatted, torose, with twelve furrows, twelve-celled; cells dissilient, crescent-shaped, with an elastic dagger point at the end; seeds solitary, compressed, sub-orbiculate, large. There is only one species, which is a native of Jamaica.

CREPITANS. CRACKLING.

Baruce fructus e pluribus nucibus arboris. Sloane, v. 2, p. 186.—*Arboreum, ramulis irregulariter ternatis, foliis cordato crenatis reflexis, petiolis biglandulis.* Browne, p. 351.

This rises from a spreading root with a soft woody stem, to the height of thirty or forty feet, dividing into many branches, which abound with a milky juice, and have scars on their back where the leaves have fallen off. The leaves are sometimes eleven inches long and nine inches broad, heart-shaped, of a beautiful green, indented on their edges, having a prominent mid-rib, with several transverse veins, which are alternate; they are upon long footstalks. The male flowers come out from between the leaves, upon foot-stalks three inches long, and are formed into a close spike or column, lying over each other like the scales of fish: the female flowers are situate at a distance from them, and have a long funnel-shaped tube spreading at the top, where it is cut into twelve or thirteen reflected parts. After the flower the germ swells, and becomes a round compressed ligneous capsule, having twelve or thirteen deep furrows, each being a distinct cell, containing one large, round, compressed, seed. When these pods are ripe, they burst with violence, and throw out their seeds to a considerable distance.

The formation and parts of this tree agree so well, in general, with those of the manchioneal, that I was induced to look upon them as two distinct species of the same genus. The branches are divided alike in both, and the leaves, which stand in the same manner, reflecting a little backwards from the direction of the footstalks, are disposed

posed pretty thick at the extremities of the branches, and sustained by footstalks, that have, in this, one gland each; in that, two. This is full of transparent juice, that of milk, both acrid; and the flowers, notwithstanding they differ in some degree; agree in the formation of the style and stigma, as well as in the disposition of the antheræ, though the number of these be not the same in both. In this the fruit is regularly divided into cells; in that, whose nut or shell is harder, these are not so regular; yet they are longitudinal, adjoining, in a number proportioned to the divisions of the stigma, and generally both regular and many in the younger germens; but some of them abort as the fruit increases.

The seeds, roasted, purge upwards and downwards. I have tasted one of them, and it appeared, at first, to be both mild and pleasant; but it soon began to warm and scald both my palate and throat, which induces me to look upon it as an improper purgative; unless it be given to raise a warmth in the bowels, where they have lost most of their vigour by a continued flux or diarrhœa, and, even then, I think the seeds of the argemone a much more eligible medicine.—*Browne*.

This tree is cultivated chiefly for ornament, and the fine shade it yields. It loves a deep rich soil, and thrives best near water. It rises to the height of thirty-five or forty feet, and expands its branches to such a distance as sometimes to cast a shade of sixty feet diameter. But, by reason of the quickness of its vegetation, its parts are of so loose a texture, that a loud clap of thunder, or a sudden gust of wind, frequently causes the largest boughs to snap asunder. Nor is its trunk of any use, except for fire-wood. The colour of the wood is whitish; its bark smooth and brown.

The fruit is flat and round, disposed regularly into cells, each inclosing a flat seed. When the seeds are taken out, the shell, which is very firm, is converted into a box for holding letter sand, whence the name. The seeds, roasted, purge upwards and downwards with great violence: they contain an acrid juice, which scalds the mouth and throat, and are therefore very properly rejected from the materia medica. The leaves are often applied with great success to the head in fevers, to mitigate or remove the pain and tension in that part.—*Long*.

A single seed, or one and a half, is recommended in dry belly-ache; Hernandez directs the seeds to be roasted. The vomiting occasioned by eating these nuts may be checked by giving a strong decoction of columbo root. Mr. A. Robinson says he ate a kernel of a fresh seed, and, in the space of five or six minutes, he grew very sick, and was purged and vomited with great violence. He says he had several times eat these kernels before, without being in the least affected, but imagines the difference to have arisen from the seeds he had before eaten being old and dry; from which it would seem that they only operated when in a green state.

SANTA MARIA LEAF—See COLT'S FOOT.

SANTA MARIA TREE.

CALOPHYLLUM.

CL. 13, OR. 1.—*Polyandria monogynia*. NAT. OR.—

This generic name is derived from two Greek words for a fine leaf.

GEN. CHAR.—Calyx a two-leaved perianth, leaflets ovate, concave, coloured, deciduous; corolla four (two) oblong, concave, spreading, petals; stamens many filiform short filaments, with erect oblong anthers; the pistil has a roundish germ, a filiform style, the length of the stamens; stigma headed, obtuse; pericarp a globular drupe; the seed globular, sub-acuminate, very large. One species is a native of Jamaica.

CALABA.

Mali persicæ mameyæ dictæ, foliis longiore, arbor maxima, cortice, sulcato, cinereo, amaro. Sloane, v. 2, p. 124. *Altissima, foliis oblongis, nitidissimis, nervosis.* Browne, p. 372.

Leaves ovate, obtuse.

This is a lofty and beautiful tree, growing frequently to the height of ninety or one hundred feet. The stem is then about two feet in diameter, very straight, and without any foliage, until near the summit, where it throws forth a beautiful and regular pyramidal foliage. The branches are blunt, emarginate, firm, on short petioles. The leaves ovate-oblong. Flowers on axillary simple racemes, whitish, and smelling sweet. Fruit greenish, pulpy, involving a hard smooth ash-coloured nut. Many of the corollas have only two petals, and the calyxes two leaves, crossing each other, and having the appearance of a four-leaved corolla. Some of the corollas have four and even five petals.

The wood of the santa maria makes good boards for inside work, but they shrink and swell much with the variations of the weather; it has also been found to make good shingles and staves for rum puncheons, as it splits freely and works easily. From many experiments lately made, the staves made from this tree, and formed into puncheons, have been found to contain rum for a length of time; but it is recommended to char the puncheons well inside. Sloane notices that this wood was used for the purpose of making staves in his time, and Dampier relates that the trees were used for masts to ships. It has been observed that near the sea-beech the wood is very apt to be destroyed by wood-ants or worms, which is not the case in the mountains in the interior. There are thought to be two sorts of it, the one with a whiter bark than the other, but this may be owing to a difference in age or soil. In the Jamaica Gazette of August 23, 1766, is inserted an account of the Musquito Shore, dated from Great Blue River, June 23, 1766, from which the following is extracted:

“The santa maria trees grow here, they are very high, straight, and large. The wood is remarkably hard, and for a considerable time impenetrable to the worm, and I am told by a gentleman of veracity, who had planked a vessel's bottom with this wood, that the vessel had afterwards, off the west-end of Bonaco, some severe blows on a rock, but was soon got off: that this timber was of so good a quality as not to split or crack, but the plank seemed much bruised, and to have deep impressions on it by the blows received. It is said, when dry, to be rather lighter than the mahogany manufactured here. Another good quality ascribed to the santa maria is, that an iron nail will never rust in the wood, of which there grows a sufficient quantity to supply the British navy with more durable plank than oak, or that of any other hitherto in use with Europeans.”

Bastard mamee or santa maria trees are very tall, and very straight, growing to fifty or sixty, some to eighty, feet high; they are very tough, and therefore made use of for

for masts of ships, being preferable to any fir trees. I had once a green balsam presented to me, brought from the Spaniards, of a very fine green, clear, and pleasant smell, which they said was the finest balsam in the world for green wounds, but could not tell me from what tree it came. Some time after, a negro brought me of the same sort of balsam, both in colour and smell, which he got from one of these trees, and I found it to be an excellent balsam; for, melt it and pour it into a green or fresh incised wound, and it would heal up in once or twice dressing. This balsam the Spaniards, while it is new and fresh, put into the hollow joints of trumpet-wood, calling it *the admirable green balsam*, but conceal its name, and the tree it comes from; yet it is for some extraordinary use that they call this tree *Santa Maria*, which makes me think it is for its balsam.—*Barham*, p. 18.

SANTOLINA—See HALBERT-WEED.

SAPOTA—See MAMMEE-SAPOTA.

SAPPADILLA—See NASEBERRY.

SARSAPARILLA.

SMILAX.

CL. 22, OR. 6.—*Dioecia hexandria*. NAT. OR.—*Sarmentaceæ*.

GEN. CHAR.—See China-Root, p. 180.

SARSAPARILLA.

Stem prickly, angular; leaves unarmed, ovate, retuse-mucronate, three-nerved.

This has the root perennial, branchy, externally brown, internally white; stems of the thickness of a man's finger; they are jointed, triangular, and beset with crooked spines. The leaves are alternate, smooth, and shining on the upper side; on the other side are three nerves or costæ, with sundry small crooked spines. The flower is yellow mixed with red. The fruit is a black berry, containing several brown seeds.

Sarsaparilla delights in low moist grounds and near the banks of rivers. In such places it thrives well in Jamaica. The roots run superficially under the surface of the ground. The gatherers have only to loosen the soil a little, and to draw out the long fibres with a wooden hook. In this manner they proceed till the whole root is got out. It is then cleared of the mud, dried, and made into bundles.

The sensible qualities of sarsaparilla are mucilaginous and farinaceous, with a slight degree of acrimony. The latter, however, is so slight as not to be perceived by many; and I am apt to believe its medicinal powers may fairly be ascribed to its demulcent and farinaceous qualities.

Since the publication of Sir William Fordyce's paper on sarsaparilla in the Medical Observations and Enquiries, vol. I. sarsaparilla has been in more general use than formerly. The planters in Jamaica supply their estates with great quantities of it; and its exhibition has been attended with very happy consequences in the yaws and in venereal affections; as nodes, typhi, and exostosis, pains of the bones, and carious or cancerous ulcers.

Sir William Fordyce seems to think sarsaparilla a specific in all stages of lues; but, from an attentive and careful observation of its effects in some thousands of cases, I must

must declare I could place no dependance on sarsaparilla alone. But if mercury had formerly been tried, or was used along with sarsaparilla, a cure was soon effected.—Where the patients had been reduced by pain, disorder, and mercury, I prescribed a decoction of sarsaparilla, and a table spoonful of the powder of the same, twice a day, with the greatest success, in the most deplorable cases of lues, ill-cured yaws, and carious or ill-disposed sores or cancers.—*Wright*.

This plant is commonly known by this name sarsaparilla, but some call it *smilax*, it being thought to be of the species of the China root. The stalk is long, serpentine, woody, and prickly, climbing like a vine or convolvulus upon every tree or shrub it is near; the flowers are white, and produce a berry, round and fleshy, like small cherries, green at first, and, as they ripen, turn a little reddish, and, when full ripe are black, containing one or two stoney seeds, of a whitish yellow, having a white kernel. Although this plant grows in great plenty in Brazil, and other parts of America, yet it is not much taken notice of by the native Indians, the use of it having been found out and improved by the expert physicians of Portugal and Spain. There are two species of it; the stalks are alike, but different in bigness and shape of the leaf. The best is that of Honduras, which hath a stalk, whose outside is very prickly, creeping on the banks in shady woody places; the leaves are cordated, and of a different length and breadth, of a fresh green on the upper side, the under side more pale, growing single on the stalks, alternatively, at a good distance from one another, having large ribs in shape and manner of *malabathrum*, or Indian leaf, at the footstalk of each leaf grow two small long tendrils or clavicles, by which it holds fast to the plant it joins to. The flowers grow in bunches, and are whitish; from thence follow the berries in bunches, first green, then red, and at last black, round, or wrinkled and shrivelled like dry cherries, containing one or two hard stones, of a whitish yellow colour, with a hard white kernel, like a small almond. The root of this plant is what is made use of, and it is long and smooth, when first gathered, like a withe, without any prickles, having a thin skin or bark; between that, and a small wire withe in the middle, lies a white meally substance when dry, which is all that is of use; and of this ptisans or diet drinks are made, to sweeten the blood, and for curing venereal diseases. The powder of the root is given, from a drachm to two, to cause sweat. It is reckoned a great alkali, to correct all saline pungent salts in the fluids of the body, and by that means cures venereal diseases, helps rheumatism, catarrhs, gouts, and all diseases proceeding from a superabounding saline acid in the blood and juices of the body.—*Barham*, p. 166.

To be good, sarsaparilla must be very dry, its filaments long, easy to cleave; and in cleaving they must not yield any dust: when boiled in water, it must give it a reddish tincture. The method of preparing it by the Spaniards and Indians of South America is as follows: They macerate an ounce of the root in almost four pints of water for twenty-four hours, and boil it away to one half. They give of the expressed decoction half a pint twice a day, four hours before their meals, in bed, covered with clothes, where they sweat two hours, mixing a sufficient quantity of the fine powder of the root with each dose of the decoction. They purge every tenth day.

SATYRION.

SATYRION

SATYRIUM.

CL. 20, OR. 2.—*Gynandria diandria*. NAT. OR.—*Orchidea*.

GEN. CHAR.—Calyx wandering spathes; spadix simple; no perianth: corolla five ovate oblong petals; three exterior; two interior, converging upwards into a helmet; nectary one-leafed, annexed to the receptacle by its lower side between the division of the petals; upper lip erect, very short; lower flat, pendulous, *prominent behind at the base in a serotiform bag*; stamens two filaments, very slender and very short, placed on the pistil; anthers obovate, covered by the two-celled fold of the upper lip of the nectary; the pistil has an oblong, twisted, inferior, germ; style fastened to the upper lip of the nectary, very short; stigma compressed, obtuse; the pericarp is an oblong, one-celled capsule, three-keeled, three-valved, opening in three parts under the keels, cohering at the top and bottom; seeds numerous, very small, irregular like saw dust. Six species have been found in Jamaica.

1. PLANTAGINEUM. PLANTAIN.

Orchis elatior latifolia asphodeli radice, spica strigosa.—Sloane, v. 1. p. 250, t. 147, f. 2.

Bulbs filiform, stem very smooth, leaves ovate, petioled, sheathing; horn of the nectary thickened; lip two-lobed, middle acuminate.

Roots filiform, long, tomentose; stem a foot high, ascending, nearly erect, round, leafy, very smooth; leaves sharp, entire, very smooth, nerved longitudinally, bright green and shining; sheaths surrounding the stem, cowled, nerved, netted, membranaceous. Spike many-flowered, (fifty) upright; flowers small, white; spathes ovate, half-embracing, membranaceous, acute. It has the flower of an orchis and the habit of a satyrium. The horn is not testiculate, but elongated, ob-ovate, like a bladder, and free; by Jacquin and others called the lower lip; but the lip is certainly trifid, with the middle segment-acuminate. Native of moist woods in shady places.—Sw.

2. HIRTELLUM. ROUGH-HAIRED.

Bulbs filiform, stem hirsute, leaves ovate, three-nerved; petioled, sheathing, nectary horned, lip three-lobed.—Sw.

3. ADNATUM. ADHERING.

Bulbs in bundles; root-leaves oblong, on very long petioles, scape sheathed; nectary horned, adnate, lip bent down, two-lobed, emarginate.—Sw.

4. SPIRALIS. SPIRAL.

Bulbs in bundles, oblong; leaves linear, scape sheathed; flowers spiral, directed one way; lip three-lobed, middle larger, crenulate.—Sw.

5. ORCHIOIDES. ORCHIS-LIKE.

Aphyllum scapo erecto, simplici subsquamosa spicato.—Browne, p. 325. S. 7.

Bulbs in bundles, oblong; leaves broad lanceolate, scape sheathed, nectary horned, lip lanceolate-acuminate.

Browne

Browne calls this the naked satyrium, which he found at the Angels, on the side of the road leading to the Red-Hills, where it was in blossom and about twelve or fourteen inches high, but without any leaves; the flowers of a flesh colour, oblong, and succulent.

6. ELATUM. LOFTY.

Erectum. foliis oblongis, petiolis vaginatis amplexantibus, spica terminali, nectariis longissimis.—Browne, p. 324. S. 2.

Bulbs in bundles, thick, tomentose; root-leaves ovate petioled, stem almost naked, nectary subtrilobate.

SAVANNA-FLOWER.

ECHITES.

CL. 5, OR. 1—*Pentandria monogynia.* NAT. OR.—*Contortæ.*

This tree is so named by Browne from the Greek word for viper, on account of its poisonous qualities.

GEN. CHAR.—Calyx a five-parted perianth, sharp, small; corolla one-petaled, funnel form, border five-cleft, flat, spreading very much; nectary of five glands standing round the germ; stamens five filaments, slender, erect, with stiff, oblong, acuminate, converging anthers; the pistil has two germs; style filiform, the length of the stamens; stigma oblong-headed, two-lobed, attached by a gluten to the anthers; pericarp two follicles, extremely long, one-celled, one-valved; seeds very many, imbricate, crowned with long down. Six species are natives of Jamaica.

1. SUB-ERECTA. SOMEWHAT ERECT.

Apocynum erectum fruticosum, flore luteo maximo et speciosissimo.—Sloane, v. 1, p. 206, t. 130, f. 2. *Nerium* 2. *Sarmentum foliis nitidis ovatis venosis, pedunculis longis ramosis, floribus fauce ampliat.* Browne, p. 180.

Peduncles racemed, leaves sub-ovate, obtuse, mucronate.

This is a shrubby plant, differing much from its congeners, abounding in milky juice, and growing among the shrubs to ten feet in height, but in savannas only three or four, and sometimes scarcely one: stems scarcely twining, climbing; leaves approaching more or less to an ovate form, either smooth on both sides or scabrous at the back; the peduncles support a few large handsome yellow flowers, hirsute on the outside and in the tube; the follicles are slender and brown.—*Jacquin.* The stalk is woody and branched; leaves smooth, opposite, of a shining green on their upper sides, but pale and veined underneath, standing on inch-long footstalks. The flowers are produced at the axils of the leaves on the sides of the branches towards the top, on long woody footstalks, at the ends of which are four or five buds, but seldom more than one flower, the others withering; they are large, of a bright yellow, and make a fine appearance: the follicles, Sloane observes, are set like bull's horns. It grows in most savannas in Jamaica, whence its name, and all parts of it are of a very poisonous nature; to which the antidote cocoon and Indian arrow-root have been found to be antidotes. The juice is said to destroy maggots in sores at two dressings.

This

This is so called in Jamaica, because it is found all the year round in blossom, in open savannas. It is too well known, and it is a pity that ever the negro or Indian slaves should know it, being so rank a poison: I saw two drachms of the expressed juice given to a dog, which killed him in eight minutes time; but it may be so given, that it shall not destroy a person in many days, weeks, months, or years. Some years past, a practitioner of physic was poisoned with this plant by his negro woman, who had so ordered it that it did not dispatch him quickly, but he was seized with violent gripings, inclining to vomit, and loss of appetite; afterwards, he had small convulsions in several parts of him, a hectic fever, and continual wasting of his flesh. Knowing that I had made it my business some years to find out the virtues of plants, especially antidotes, he sent to me for advice; upon which I sent him some *nhandiroba* kernels (antidote cocoon) to infuse in wine, and drink frequently of, which cured him in time; but it was a considerable while before his convulsive fits left him. The whole plant is full of milk; it is always green, and no creature will meddle with it.

2. BIFLORA. TWO-FLOWERED

Nerium 1.—*Sarmentosum, foliis oblongis acutis oppositis subtus cinereis, tubo floris fauce ampliato.* Browne, p. 180.

Peduncles two-flowered.

This is a branched shrub, full of a milky juice, supporting itself by stems, partly erect, partly twining upon trees, and mounting them to the height of twenty feet; hence frequently acquiring the air of a tree. Leaves oblong, growing narrower to the base, obtuse at the end, with a small point, three inches long. Peduncles sometimes but rarely three-flowered; flowers handsome, very white, with a yellow throat. Native of salt marshes.

3. TORULOSA. TWINING.

Nerium 4.—*Sarmentosum scandens, ramulis tenuibus folliculis gracilibus torosis.* Browne, p. 181, t. 16, f. 2.

Peduncles sub-racemed, leaves lanceolate acuminate.

This curious plant, Browne says, is frequent about the mountains of New Liguanea. It is weakly, with twining, round, shrubby, stems, sustaining itself on neighbouring bushes, among which it rises to a considerable height. The branches and follicles are extremely slender and delicate, the leaves two inches long; the common peduncles support about six small yellow flowers. The whole plant abounds in a milky gluten. It flowers in March. Swartz observes that Browne's figure is better than Jacquin's.

4. UMBELLATA. UMBELLED.

Apocynum scandens majus foliis subrotundo. Sloane, v. 1, p. 207, t. 131, f. 2. *Scandens, foliis ovatis nitidis aenosis; floribus herba-*]
ceis. Browne, p. 182.

Peduncles umbelled, leaves ovate-obtuse mucronate, stem twining.

This climbs to the height of fifteen feet by its shrubby, twining, pliant, stems, which are woody and suberous at bottom, but round, green, and glossy, above; the whole abounds in a clear glutinous juice. At every four inches distance are joints, from which issue leaves and sometimes branches, both opposite. Leaves pedicelled, roundish-ovate, sub-cordate at the base, three or four inches long. The peduncles are axillary,

several inches long, with from four to seven flowers at the end, in a kind of umbel, with some stipules, serving the purpose of an involucre. The flowers are large and handsome, of a greenish yellow colour, the border whitish, having a long slender tube. Browne observes it is somewhat of a deleterious nature, and that there is a small variation of it in the dry savannas with pointed leaves, and very slender stalks. It flowers from October to February.

5. ASPERUGINIS. ROUGH.

Peduncles racemed, follicles filiform, leaves oblong, acute, rough above, stem twining. Sw.

6. FLORIBUNDA. MANY-FLOWERED.

Racemes corymbed, leaves ovate-acuminate, nerves parallel, branches almost erect. Sw.

SAVANNA-WATTLE—See CLOVEN-BERRIES.

SAVIN-TREE.

FAGARA.

CL. 4, OR. 1.—*Tetrandria monogynia*. NAT. OR.—*Dumosæ*.

GEN. CHAR.—Calyx a four-cleft very small perianth, leaflets concave, permanent; corolla four oblongish petals, concave, spreading; stamens four, longer than the corolla, with ovate anthers; the pistil has an ovate germ, a filiform style the length of the corolla, and a two-lobed obtusish stigma; the pericarp a globular one-celled capsule, two-valved; seed single, round, bright. Four species of this genus are natives of Jamaica.

1. PTEROTA.

Lauro affinis jasmini folio alato, costa media membranulis utrinque exstantibus alata, ligni duritie ferro vix cedens Sloane, v. 2, p. 25, t. 162, f. 1. *Subspinosa, foliis minoribus per pinnas marginato-alatas dispositis, spicis geminatis alaribus*. Browne, p. 146, t. 5, f. 1.

Leaves emarginate.

X This tree is also called bastard iron wood from the hardness of its wood; and rises from ten to twenty feet high, or more. It is common in Jamaica, and from four to eight inches in diameter; the trunk is of a dark brown colour, having white spots, and is thick set with conic spines, resembling those of the prickly yellow wood. The branches are numerous, and are abundantly furnished with pinnated leaves, the leaflets of which are small, crenated round the edge, with an odd one at the end; they are ovate and full of oily cells, which, held to the light, appear as perforations. The common petiole is margined and jointed. Spikes axillary, sessile, in pairs, one and a half or two inches long, the petals are white. The seed is oval, round, black, shining, and brittle; the capsule of an ovate form, opening into two valves, containing one seed. The wood is of a pale yellow colour. In some places it is called Essence of Lemon Tree, and Wild or Bastard Lemon. The smell, taste, and glowing warmth, of the leaves, bark, and capsules, are precisely like those of rue.

2. EMARGINATA.

2. EMARGINATA. EMARGINATE.

Lauro affinis, terebinthi folio alato, ligno odorato candido, flore albo.
Sloane, v. 2, p. 24, t. 168, f. 4.

Leaves pinnate, leaflets ovate-emarginate, veined; racemes terminating, compound, flowers three-stamened.

The trunk of this tree is the size of the human leg, sometimes beset with many short prickles; It rises twenty feet high, and its branches are inclined towards the ground. The wood is white, solid, and odoriferous, with a pretty large pith. Leaves at the ends of the branches, consisting of two, three, or more, pairs of leaflets, without any odd one, opposite, at half an-inch distance, smooth, dark green, an inch long, and three quarters of an inch broad in the middle. Flowers white, small, like those of elder, three petaled; fruit round, the size of black pepper; seed black, smelling somewhat like bay-berries. Some planters call it *lignum rorum*, the smell being somewhat like that. The smoke of the wood in burning is odoriferous, and probably was the fine scent which Columbus found near the south shore of Cuba, on his discovery of that island.
—Sloane.

3. SPINOSA. THORNY.

Leaves pinnate, sessile, ovate-acuminate, both they and the branches spiny underneath; flowers three-stamened.—Sw.

4. ACUMINATA. ACUMINATE.

Leaves pinnate, leaflets entire elliptic acuminate, shining, coriaceous; flowers in cymes, three-stamened.—Sw.

SAVORY.

SATURÉIA.

CL. 14, OR. 1.—*Didynamia gymnospermia.* NAT. OR.—*Verticillata.*

GEN. CHAR.—Calyx a one leafed perianth; corolla one petaled, ringent, with segments nearly equal; stamens four distant filaments, with converging anthers: the pistil has a four-cleft germ; setaceous style, and two stigmas; there is no pericarp, calyx converging, containing the seeds, which are four, roundish. One species is a native of Jamaica.

VIMINEA. TWIGGY.

Sideritis. Vimeia, foliis minoribus ob-ovatis, pedunculis trifloris alaribus. Browne, p. 258.

Peduncles axillary, three-flowered, involucre linear, leaves lanceolate-ovate, quite entire.

This is a shrub from two to twelve feet in height, with an upright stem, very much branched and loose; branches four-sided, strict, subdivided, long; with the branchlets four cornered, striated, loose, directed one way, ferruginous pubescent: leaves opposite, approximating, small, oblong, wedge-shaped, sometimes ovate, convex, sometimes flat, nerved, somewhat rugged, hoary underneath; petioles short; leaflets in the axils of the larger leaves. Flowers subsessile, at the ends of the branches, by threes,

the length of the leaves, white; under the flowers a few linear leaflets, called by Linneus the involucre. Calyx five-cleft, ten-streaked, five-cornered, hispid, hoary; segments almost equal, the two upper ones approximating, acute, linear erect: tube of the corolla scarcely longer than the calyx; upper lip, or two upper segments, shorter, erect, approximating, less divided, ovate; lower lip, or three lower divisions, nearly equal, the two lateral ones ovate, the middle one roundish, concave, bent in: filaments inserted into the middle of the tube, which is villose, two of them are shorter than the tube; anthers distant, roundish, black; germ ovate, style longer than the tube, awl-shaped; stigma simple, acute, bent in. Native of the cooler mountains of Jamaica, flowering in autumn. There are two varieties; one a shrub, smaller and more rigid, with smaller oblong leaves, the other a little tree, twelve or fifteen feet high, with the branches loose and rounder leaves. The whole plant is very sweet-scented even when dry. Sw. Browne calls it *weakly all-heal*, and says it grows among the bushes in the cooler mountains of Liguanea, spreading its slender branches six or seven feet.

No English Name.

SCÆVOLA.

CL. 5, OR. 1.—*Pentandria monogynia*.

NAT. OR.—*Campanularia*.

GEN. CHAR.—Calyx a superior perianth, very short, five-cleft, permanent; corolla one-petaled, unequal, tube long with a longitudinal fissure, border five-cleft ascending, segments directed one way, lanceolate, membranaceous at the edge; stamens five filaments, short, capillary, inserted into the receptacle; anthers distinct, erect, oblong, obtuse; the pistil has an inferior ovate germ, style filiform, thicker above, longer than the stamens, issuing from the fissure, curved in towards the border; stigma flatted, obtuse, with the mouth open, pericarp a roundish drupe, umbilicate with a dot, one-celled; seed an ovate nut, wrinkled, acute, two-celled. One species has been discovered in Jamaica.

LOBELIA.

Leaves obovate, smooth, quite entire.

Stem suffrutescent, two feet high, almost single, thick, round, smooth; leaves petioled, scattered, oblong, entire, fleshy, veinless, very smooth; racemes axillary, dichotomous, terminating. Pedicels one-flowered. Underneath the flowers, or at the forkings of the racemes are little, opposite, awl-shaped bractes, villose beneath.—Sw. Linneus remarks that the corolla is villose within. Jacquin describes the flowers as being whitish, and as a brittle diffused shrub branched at the base and decumbent, frequently covering the sandy sea-shores very thick; the leaves thick, shining, and succulent; the drupe dark.

SCALLIONS—See ONIONS.

SCAMMONY—See PURGING-SEA-BINDWEED, and SPANISH ARBOUR VINE.

SCARLET CORDIA—See CLAMMY CHERRY.

SCARLET

SCARLET PITCAIRNIA.

PITCAIRNIA.

CL. 6, OR. 1.—*Hexandria monogynia*. NAT. OR.—*Coronaria*.

So named in honour of William Pitcairn, M. D. an eminent physician, and collector of foreign plants.

GEN. CHAR.—Calyx one-leaved, three-parted, half superior, tubular, swelling at the base, permanent; segments lanceolate, erect; corolla three-petaled; petals linear convoluted, with a nectariferous scale at the base; stamens six filaments inserted into the receptacle, with oblong, erect, anthers; the pistil has a half superior, three-cornered, germ; a three-grooved style, and three contorted stigmas; the pericarp is three capsules opening inwards, Swartz says three cells with the cells opening inwards; seeds very numerous, winged, or membranaceous appendicled on both sides, fastened to the receptacle. One species is a native of Jamaica.

BROMELIEFOLIA. BROMELIA-LEAFED.

Leaves ciliate-spiny, peduncles and germs very smooth.

Root perennial, with long, filiform, sub-divided fibres; leaves radical, numerous, sheathing at the base, ensiform, three or four feet long, half an inch wide, membranaceous, somewhat glaucous, loose, serrate-spiny at the edge; spines recurved, shining, black. Scape upright, two feet high or more, round, covered with linear-lanceolate bractes, sheathing at the base, distant, long, the upper ones scarlet, flowering at the top. Peduncles scattered, distant, filiform, naked, smooth, an inch and half long, almost equal, one-flowered, with little membranaceous bractes under them; petals and filaments blood red; stigmas red; seeds brown, with one edge and the tip white. Native of Jamaica, on the shady sides and precipices of the mountains.—Swartz. This is the *hepeticus angustifolia* of Swartz, who places this genus between *tillandsia* and *burmannia*.

SCARLET SEED.

Genus doubtful.

CL. 13, OR. 1.—*Polyandria monogynia*.

GEN. CHAR.—Calyx a double perianth; exterior small, two-leaved; interior five-leaved, leaves thickish, roundish, subequal, patent, persistent; corolla five-petaled (sometimes six to eight) concave, ovate, smaller than the calyx; stamens many filaments, subulate, above the small petals, fixed to their base; anthers growing from the sides of the filaments, placed in opposition: the pistil has an ovate germ, below the calyx, a subulate style, and acute stigma: the pericarp is a shining capsule, fleshy-fuagose, bilocular; seeds many, great part abortive, oblong, seeming two-lobed; the proper shell fragile, one-celled, recurved, and appressed, as it were two-celled, with a thin waxy reddish covering; receptacle columnar.

Minor diffusa, obscure virens; foliis obovatis; fronde comosa, fructibus singularibus ad alas. Browne, p. 368, t. 20, f. 3.

This shrubby tree is frequent in the red hills, where it grows pretty luxuriantly, but it seldom rises above twelve or sixteen feet in height, or exceeds six or seven inches in diameter.

diameter. When the fruit is ripe, it bursts upon the tree, and sheds its seeds, of which the smaller birds seem very fond, they are always enveloped in a greasy waxen substance of a scarlet colour, which probably may serve both for the dyers and painters use when better known. I believe this may be a species of *Sloanea*: the wax and formation of the seeds, which is nearly the same in both, induce me to think so, though the capsule is smooth in this.—*Browne*. Dr. Browne had not seen the perfect flower and does not describe the corolla and stamens.

No English Name.

SCHŒFERIA.

CL. 22, OR. 4.—*Diacia Tetrandria*.

So named by Jacquin, in honour of Jacob Christian Schœffer, author of some botanical works.

GEN. CHAR.—Male calyx a four or five-leaved perianth; leaflets ovate, concave, spreading; corolla four-petaled, petals lanceolate-ovate, spreading, or in place of these a four-cornered convex nectary in the middle of the flower; stamens four erect filaments, with roundish erect anthers; pistil the rudiment of a germ, without style or stigma. Female calyx a one-leaved four or five parted perianth, inferior; segments obtuse, spreading; corolla four-lanceolate-ovate, concave, petals, wider at the end, spreading, deciduous; or in their place a nectary, which is a fleshy rim about the germ; the pistil has a roundish germ, two very short reflexed styles, stigmas bifid or entire compressed headed; the pericarp a roundish two-celled berry; seeds solitary hemispherical. One species is a native of Jamaica.

COMPLETA.

COMPLETE.

Buxi folio majore acuminato, arbor baccifera, fructu minore croceo dipyreno. Sloane, v. 2, p. 102, t. 209, f. 1.

Flowers four-petaled axillary.

This is a small tree or a shrub, with an upright trunk and a smooth ash-coloured bark; branches almost upright unequal, rigid, smooth; leaves on short petioles, alternately smaller, ovate-acute, almost entire, or very slightly crenate, veined, rigid, with the end recurved a little, green, shining; peduncles several, crowded, many times shorter than the leaves, one-flowered, deciduous, having small calyx-form scalelets at their base. Flowers white.—*Swartz*. Sloane says the trunk is as thick as the thigh, and that this tree grows twenty or thirty feet high, with crooked branches; that the leaves are almost like box-leaves, and the fruit not so large as a pepper-corn, with a thin, almost dry, orange-coloured, skin. It grew near Passage-Fort.

No English Name.

SCHWENKFELDIA.

CL. 5, OR. 1.—*Pentandria monogynia*.

NAT. OR.—*Rubiacea*.

This was so named in memory of Casper Schenkfelt, a Silesian physician, and author of a catalogue of plants and fossils.

GEN.

GEN. CHAR.—Calyx has a four-leaved involucre; perianth one-leaved, five-parted, superior, permanent; segments lanceolate acute; corolla one-petaled, funnel form; tube long, slender, throat hirsute; border five-parted; segments lanceolate-acute; stamens five filaments, inserted into the tube of the corolla; anthers parallelipiped, incumbent; the pistil has an inferior ovate germ, a filiform style, and five oblong stigmas; the pericarp is a globular berry, crowned with the calyx, five-celled; seeds very many, small, fastened to semi-lunar receptacles. One species has been found in Jamaica.

HERTA. ROUGH-HAIRED.

Leaves ovate-lanceolate acuminate, flowers peduncled.

This is a climbing shrub, branched, with the stem and branches striated and hirsute, leaves opposite, nerved, hirsute, on short, round, hirsute, petioles; stipules large, interposed between the petioles, wide, cordate-ovate, membranaceous, whitish. Peduncles axillary, from the bosom of the stipules, shorter than the petioles, umbelliferous; umbellets three-flowered. Involucrum one-leaved, four-cleft; segments ovate, spreading, rough-haired. Flowers pedicelled, white, void of scent. Segments of the perianth long, erect, striated, rough-haired, permanent. Corolla funnel form, with the tube twice as long as the calyx, and the border flat and five-cleft, with lanceolate patulous segments; anthers linear, the length of the filaments; style the length of the corolla; stigma five-parted; berry snow white when ripe. Native of Jamaica in the western parts of the island, in mountain woods, flowering in April.—Swartz.

SCORDIUM—See Germander.

SCOTCH GRASS.

PANICUM.

CL. 3, OR. 2.—*Triandria digynia*. NAT. OR.—*Graminae*.

GEN. CHAR.—See PANIC GRASS, v. 2. p. 29,

MOLE. SOFT.

Gramen panicum maximum, spica divisa, aristis armatum. Sloane, v. 1, p. 106.—*Majus, panicula variori, spicillis longioribus uno versu floridis.* Browne, p. 133.

Spikes panicled, alternate, directed one way, spreading; spikelets approximating, pedicelled, directed one way, awnless.

Culm several feet high, decumbent at the base, ascending, subdivided at bottom, jointed, round, thick, pubescent. Leaves long, broad-lanceolate; rounded at the base, flat, villose, soft; sheaths closely girding the culm, striated, pubescent; joint thickish villose. Spikes erect; spikelets two or three clustered, on short pedicels, turned towards the lower side, largish, oblong, brown. Outer valve of the calyx minute; inner ovate, blunt, striated, pubescent; valves of the corolla in the hermaphrodite florets nearly equal, ovate; one flatter; anthers very dark purple, stigmas the same and villose; seed oblong shining. Valves of the neuter corolla unequal; outer ovate, striated, brown; inner flat, whitish, minute; no filaments. The culm being thick and succulent is very grateful to cattle.—Swartz. This well known and highly profitable

profitable grass received its name in Jamaica, from having been first brought there from a place called Scotland, in Barbadoes; it is now very generally cultivated in all swampy or marshy situations, where it thrives very luxuriantly, and affords a most hearty fodder for all sorts of cattle and horses. From its great productiveness it has been found near the towns to be the most profitable plant in the island; especially in dry seasons, when guinea grass is scarce. In Barham's time, before the introduction of that plant, he states that fifty acres of it was a good estate. It is easily propagated by setting the joints in holes, about two feet asunder, and in six months after is fit to cut, and may be so every month or six weeks after, if the seasons are favourable, and the grass kept clean. When once planted it lasts for many years, especially if occasionally supplied where it fails with young plants, which appear in a few days, and spread and creep along, at first, casting out new roots at every joint, as they run. When the main stalks or roots become woody, they do not throw out so luxuriantly as before, and should be removed for fresh plants, during every cleaning.

SCREW-TREE.

HELICTÈRES.

CL. 20, OR. 6.—*Gynandria decandria*. NAT. OR.—*Columniferae*.

CL. 15, OR. 5.—*Monadelphina decandria*. Swartz.

This generic name is derived from a Greek word signifying spiral, on account of the spiral form of the fruit.

GEN. CHAR.—Calyx a one-leaved perianth, tubulous, half ovate, obliquely spreading, unequally five-cleft, coriaceous; corolla five oblong petals, equal in breadth, fixed to the receptacle, longer than the calyx; claws long, with a tooth on each side at the base; nectary of five-petal shaped, lanceolate, very small, leaflets, covering the germ; the stamens five, ten, or more, very short, at the base of the germ; anthers oblong, lateral; the pistil has a filiform receptacle, very long, bowed back, bearing an ovate germ at the top; style subulate, longer than the germ; stigma subquinquefid; pericarp five capsules, often twisted spirally, one-celled, seeds very many, angular. One species is a native of Jamaica.

ISORA.

Abutilo affinis arbor altheæ folio, cujus fructus est styli apex auctus quatuor vel quinque siliquis hirsutis, funis ad instar in spiram convolutis, constans. Sloane, v. 1, p. 220. *Villosa et fruticosa; foliis cordato-acuminatis, serratis.* Browne, p. 330.

Decandrous; leaves cordate-serrate; the whole fruit twisted.

This is a small upright tree, about twelve feet high, branching but little; younger branches, peduncles, calyxes, and leaves, tomentose; leaves petioled, alternate, acute, stipules in pairs, bristle-shaped. Peduncles many-flowered, terminating, glandular; calyx sub-campanulate, unequally five toothed; petals white, obtuse, reflex; germ five-grooved, protruded beyond the flower on a very long pedicel, calyced with five peculiar leaflets; filaments ten, upright, without the calyx of the germ, which is wholly covered by the transverse oblong anthers. Capsules twisted spirally into an ovate fruit; their tips make one revolution, and are covered with a close nap, which is finally worn off by the weather before they fall: seeds angular, ovate.—*Jacquin*.

This

This tree is about fifteen feet high, has a trunk as large as one's leg, a smooth white bark, and leans towards the ground. Its leaves are two inches and a half long, and one and three quarters over, from a broad round base, ending in a snipt point, or serrated about the edges, having several pretty high ribs on its under side, being soft, of a yellowish green colour, and downy. At the tops of the branches come the flowers, standing in a rough green calyx, they are white, out of the centre of which comes a long stylus or string, having a roundish hirsute button at the end, which augments and becomes its fruit, and consists of four or five round, small, brown siliquæ, ropes, or rather round follicles, hairy, dark brown, coloured, very hard wreathed, or rolled spirally, one by another, and containing a great quantity of round brown seed, which falls out of the ends of the pods. It grows on the Red Hills every where, on the road to Guanaboa. The leaves are used in decoctions for glysters, with oil and salt, as those of mallows. It has, in the juice of the root, great virtues in the empyema and stomach diseases. The root applied outwardly in measles, whitlows, and other such diseases, is very good.—*Sloane*. Browne says it is frequent in gravelly hills, and has much the habit of the mallow tribe, from which it is distinguished by the spiral form and connection of its capsular seed-vessels, and the peculiarities of the parts of the flower. It blossoms in March and April.

SEA-BEAN—See CAT-CLAW.

SEA-BINDWEED—See PURGING SEA-BINDWEED.

SEASIDE-BALSAM—See WILD ROSEMARY.

SEA-SIDE BEECH—See JAMAICA BARK.

SEA-SIDE OR BASTARD GERMANDER.

STEMODIA.

CL. 14, OR. 2.—*Didynamia angiospermia*. NAT. OR.—*Personatæ*.

GEN. CHAR.—Calyx a one-leafed, five-parted, erect, perianth, equal, permanent; corolla one-petaled, irregular, tube the length of the calyx, border sub-bilabiate, almost upright; upper lip ovate entire, lower three-parted, with the parts rounded and equal; stamens four almost equal filaments, length of the tube, all bifid; anthers eight, each placed on an arm of the filaments; the pistil has a bluntish germ, a simple style the length of the stamens, stigma bluntish; the pericarp is an oblong capsule, ovate, two-celled, two-valved, partition contrary; seeds numerous, globular, receptacle sub-cylindrical. One species is a native of Jamaica.

MARITIMA.

MARITIME.

Scordium maritimum, fruticosum, procumbens. flore ceruleo. Sloane, v. 1, p. 175, t. 110, f. 2. Stemodiaca.—*Maritima odorata; foliis minoribus, sessilibus, denticulatis, hastatis; floribus solitariis alaribus.* Browne, p. 261, t. 22, f. 2.

Leaves opposite, half embracing, flowers sessile, solitary.

Root long, round, with lateral horizontal fibres. Stem from one to three feet high, erect, four-cornered, hirsute, sometimes in hedges near the sea-coast in a manner scandent. Branches numerous, shorter, scattered, alternate, opposite, three or four together, quadrangular, leafy, hirsute. Leaves small, sessile, ovate-lanceolate, obtuse,

tuse, serrate, thickish, hirsute, with smaller leaves in the axils of the larger. Flowers few, axillary, among the terminating leaves, small, white, or blue; border of the corolla almost equal, four-cleft, upper segment a little wider, almost upright, spreading, emarginate, the two side ones and the lower segment equal, roundish, entire, convex; capsule oblong acuminate, seeds roundish minute. Sw. This plant is very common by the sea-side in all the southern parts of Jamaica, and has a pleasant aromatic smell and bitterish taste, and is probably an excellent stomachic and aperitive. The leaves are pretty thick upon the branches, and slightly beset with down.—*Browne*. Germander, or water germander, called scordium, hath a small fibrous root, and a rough four-square stalk, lying spreading on the ground, three or four feet long, sending out leaves two and two of a side, opposite to one another, oblong, and without any foot-stalk, jagged about the edges, hoary, of a rank smell, and somewhat clammy; the flowers are blue, and four-leaved; after which come black cornered seeds. It is a specific or counter-poison against infections, contagious, or epidemic distempers. It is good against the strangury, and provokes the terms. You may take the juice, infusion, decoction, or essence, which takes away the gnawing pains of the stomach, sides, or *pleura*. Infused in restringent wine, it is good against fluxes. The powder is given from half a drachm to a drachm, in its distilled water or syrup, to facilitate labour; it opens obstructions and kills worms.—*Barham* p. 64.

SEA-SIDE GRAPE—See BAY-GRAPE.

SEA-SIDE LAUREL.

XYLOPHYLLA.

CL. 5, OR. 3.—*Triandria trigynia*. NAT. OR.—*Tricoccæ*.

CL. 23, OR. 1.—*Polygamia monœcia*.—Swartz.

This generic name is derived from two Greek words, signifying wood and a leaf.

GEN. CHAR.—Calyx a five or six parted perianth; no corolla; nectary six glands at the base of the germ, or a rim surrounding the germ; stamens five very short filaments, (*Gærtner* says three to six); anthers shorter than the flower, biggish; the pistil has a roundish germ; three short styles; stigmas jagged or bifid; the pericarp is a roundish three-celled capsule; seeds two in each cell. This genus, of which four species are natives of Jamaica, differs from *phyllanthus* only in having the flowers from the notches of the leaf.

1. LATIFOLIA. BROAD-LEAVED.

Lonchitidi affinis arbor anomala folio, alato e pinnarum crenis fructifero. Sloane, v. 1, p. 80.—*Foliis latioribus, utrinque acuminatis apicim versus crenatis, ad crenas floridis.* Browne, p. 188.

Leaves pinnate, broad-lanceolate, crenate, flowers peduncled, three-stamened, monœcious.

Stem shrubby, one or two feet high; branches irregular, roundish, compressed; leaves distich, alternate, scarcely petioled, crenate towards the end, smooth on both sides, stiffish. Flowers clustered, peduncled, polygamous, hermaphrodite and female mixed; females always terminating, longer, pedicelled; calyx in both sorts six-parted, coloured, permanent. In the hermaphrodites six very short filaments, with roundish

roundish depressed anthers; germ ovate; style erect; longer than the stamens, three-parted; stigmas reflexed, entire, obtuse, yellow; capsule three-celled, cells two-valved, two-seeded; seeds ovate; flat on one side. In the females, stigmas trifid and rudiments of stamens fastened to the germ. Germ, style, and capsule, as in the others. Native of maritime calcareous rocks.—*Swartz*.

This is remarkable for producing two kinds of branches, the first are round, brown in colour, like the trunk; and flattened ones which are smooth and shining, with margins slightly dented; from which, when the plants are young, about four inches high, come forth the leaves, one from each dent, supported by very short pedicels; they are about two-tenths of an inch long, rounded form, of a pale green colour, and their substance furnished with a middle rib and alternate veins; as the plant advances, these leaves drop off, and in time the flowers are produced from the crena of the same, or such like foliated branches.

2. ANGUSTIFOLIA. NARROW-LEAVED.

Foliis angustis longioribus levissime crenatis, quandoque confertis,
Browne, p. 188.

Leaves pinnate, linear-lanceolate, marked with lines, crenate; flowers peduncled, hermaphrodite.

This shrub grows much the same size as the other; its leaves come out without any order; the flowers are produced on the edges, towards the upper part especially, where they are placed very closely, and, with the shining green colour of the leaves, make a very beautiful appearance. It also grows on rocks near the sea. *Swartz* notices a variety, *linearis*, with linear leaves, marked with lines and white flowers.

3. ARBUSCULA. LITTLE-TREE.

Leaves pinnate, lanceolate-acuminate, sub-crenate, coriaceous; flowers peduncled, three-stamened, monœcious,

This is a most elegant evergreen plant, with a woody stem, about three feet high, very simple and upright, and about a fingers thickness; bark ash-coloured, marked with tubercles from the fallen leaves; leaves alternately spreading on the top of the plant, strong, smooth, foot-stalked, and pinnated with five or six leaflets, without an odd one, all lanceolate, serrulated, and coriaceous; the younger ones often purplish. From the notchings of the leaves proceed slender footstalks of half an inch in length, each bearing a single flower, which is small and of a pale sulphur colour.—*Jacquin*.

4. MONTANA. MOUNTAIN.

Leaves distich, broad-lanceolate, gash-crenate, branches ancipital at the top, flowers sessile. *Sw*.

SEA-SIDE OX-EYE.—*See* OX-EYE.

SEA-SIDE PLUM-TREE

XIMENIA.

CL. 8, OR. 1.—*Octandria monogynia* NAT. OR.—*Aurantia*.

So named after Ximenes, a Spaniard, author of a work on the Animals and Plants of New Spain, 1615.

GEN. CHAR.—Calyx a one-leafed four-cleft perianth, acuminate, very small, permanent; corolla four oblong petals, hairy within, below erected into a tube, above rolled back; the stamens are eight filaments, erect, short; anthers linear, erect, obtuse, length of the corolla; the pistil has an oblong germ, a filiform style the length of the stamens, and an obtuse stigma; the pericarp a sub-ovate drupe; seed a roundish nut. This genus, of which there are two species natives of Jamaica, is nearly allied to the *melicoccus* or genip.

1. AMERICANA.

AMERICAN.

Lycium buxi folio rotundiore integro, flore purpureo tetrapetalo, spinis validissimis et longis armatum. Sloane, v. 2, p. 103, t. 210, f. 1. *Fruticosa et spinosa, foliis ovatis nitidis confertis, floribus solitariis,* Browne, p. 370.

Leaves oblong, peduncles many-flowered.

This shrub has a smooth trunk and branches, the branchlets spiny, round, striated; leaves in alternate clusters, two or three together, ovate, seldom emarginate, entire, nerved, smooth on both sides; petioles roundish, flat above, smooth; spines lateral, erect, at the base of the petioles, longer than them, thickish, awl-shaped. Peduncles axillary, or from the tubercle of the petioles, shorter than them, bent down, round, from three to five-flowered; pedicels one-flowered; calyx four-cornered, four-toothed, very small, spreading; petals four, lanceolate, converging at the base, reflexed, hairy within, pale, smooth on the outside; filaments eight, shorter than the petals; drupe the size of a small apple, roundish, yellow when ripe, containing a spherical nut with a white kernel in it. *Sw.* This is thought to be Browne's *brabila*, which he found near the beech at Port-Antonio, growing to the height of eight or nine feet. He only saw the fruit, which had all the flavour and appearance of the European plum; the shell was smooth, and the pulp and skin of a pale red colour; the leaves and foot-stalks of a pale green.

2. INERMIS.

UNARMED.

Amyris 3.—Arborescens foliis ovatis glabris, vetustioribus confertis, petiolis submarginatis, floribus solitariis. Browne, p. 209.

Leaves ovate, peduncles one-flowered.

This is a shrubby bushy tree, and divided very much towards the top, though not above eight or nine feet in height; the trunk about four and a half inches diameter, very simple towards the root; the leaves not above an inch in length, of an oval form, and dispersed very thick upon the smaller branches. The perianth is five-cleft; segments of the corolla erecto-patent. It grew near the Rio-Grande, in St. George's—*Browne*. A. Robinson says he found this tree in blossom in February, at Manchioneal-Bay, in the morass; observing the germ oblong and tetragonal, he cut it transversely and found four cells. The lower part of the germ punctured. The style quadragonal and the stigma quadrate, flat, and not broader than the apex of the style; the stamens were eight filaments of a moderate length, not short, but appeared so by their repand and crooked form. In the spring this tree casts its leaves, and the blossoms and new leaves appear together; they grow in simple umbels from the bosoms of the leaves, several umbels together, each of which is sustained by a short peduncle. The fresh flowers have a delicate smell like Jasmine.

SEA.

SEA-SIDE PURSLANE.

SESUVIUM.

CL. 12, OR. 3.—*Icosandria trigynia*.—NAT. OR.—*Succulentæ*.

GEN. CHAR.—Calyx a one-leafed bell-shaped five-parted perianth; segments ovate, acute, coloured within, shrivelling; no corolla; stamens very many filaments, awl-shaped, inserted into the calyx below the segments, and shorter than the calyx, with roundish anthers; the pistil has an oblong germ, in the bottom of the calyx, three-cornered above; styles often three capillary, erect, length of the stamens; stigmas simple; the pericarp an ovate three-celled capsule, cut round; seeds roundish, flattish, having a beak at the margin. There is only one species a native of Jamaica.

PORTULACASTRUM.

Portulacca aizoides maritima procumbens, flore purpureo. Sloane, v. 1, p. 204.—*Repens, foliis oblongis turgidis, floribus sessilibus singularibus ad alas.* Browne, p. 241.

Root perennial; stem herbaceous, four or five inches long, decumbent, subdivided, round, succulent. Leaves wedge shaped, on very short petioles, opposite, obtuse, fleshy, thick, smooth, bright green; petioles sheathing, embracing, with membranaceous edges. Peduncles solitary, axillary, shorter than the leaves; flowers green on the outside, white and blood-red within; calyx corolline; anthers small, blood-red; germ acuminate; styles three, sometimes, but seldom, four; seeds black. Swartz.—This plant is very common in all the lowlands about the Ferry, (in marshy grounds near Passage-Fort, Old-Harbour, and on the keys outside of Port-Royal), and grows in thick beds on every spot of ground that rises above the level of the water. It is very succulent, and full of a neutro-alkalescent salt, which may be easily extracted, and would probably answer all the purposes for which the salts of *kali* are now used. Browne. Sloane says it is pickled and eat as English samphire; and in Dancer's Medical Assistant decoction is recommended as a gargle or mouth water.

SEA-WEEDS.

ALGÆ.

CL. 24, OR. 4.—*Cryptogamia algæ*.

Of sea-weeds there are a great many to be found on the coasts of Jamaica; and their general uses are for manuring land, or for burning into kelp. Many of them are very beautiful, and some of the species are eatable. Besides those already noticed under the English name liverwort, the following are considered as indigenous to Jamaica.

1. FUCUS.

GEN. CHAR.—Male vesicles smooth, hollow, with villose hairs within, interwoven: Female vesicles smooth, filled with jelly, sprinkled with immersed grains, prominent at the tip; seeds solitary. Of this the following five species have been found in Jamaica.

1. TURBINATIS.

TURBINATED.

Fucus marinus vesiculas habens membranis extantibus alatas. Sloane, v. 1, p. 58, t. 20, f. 6.

Filiform.

Filiform, slightly branched; vesicles racemed.

This has a dark coloured, tough, roundish, crooked stem, about nine inches high, having many crooked twigs very thick set, with bladders full of air, which are triangular-roundish, having an extant foliaceous membrane at top encircling it, and three other extant alae underneath, appearing funnel-shaped, of a blackish-brown colour, when dried, like glue, smelling strong of the sea, and of a saltish taste. It has several round protuberances over its surface and grows on all the coasts of the island, or rocks covered with the sea.—*Sloane*,

2. NATANS. SWIMMING.

Lenticula marina serratis foliis. *Sloane*, v. 1, p. 59.—*Caule tereti ramossissimo, foliis oblongis serrato dentatis, vesiculis globosis.* *Browne*, p. 72.

Filiform, compressed, pinnate; leaves oblong lanceolate, serrate; vesicles globular, peduncled, scattered, on flat dilated peduncles.

This is called the gulph weed, of which both *Sloane* and *Browne* make a larger and smaller kind, which difference may probably be only occasioned by their being older and younger plants. They are very frequent in all the American seas, and often thrown on the shores by high winds. They also grow on rocks. This is supposed to be the weed which was so plentiful in these seas as to retard the sailing of *Columbus's* ships; as well as others that have been obliged to cut their way through it. *Acosta* says it is eaten greedily by goats, and that it is good pickled. He also mentions a seaman much troubled with sand and gross humours, who found relief from eating this weed both raw and boiled.

3. ACINARIUS. BERRIED.

Caule tereti ramoso, foliis linearibus, capsulis, foliolatis. *Browne*, p. 72.

Filiform, branched; leaves linear, very entire; vesicles globular peduncled.

This branched fucus, with capillary leaves, is frequently found in the British Channel, and is distinguished from the foregoing, which it resembles very much in the general form, by its simple capillary leaves.—*Browne*.

4. VESICULOSUS. BLADDERY.

Linear, forked, entire, with globular, innate and axillary vesicles, cloven at the tips, barren ones flat, fertile one tumid.

The flat, divided, and marginated, fucus, with large spongy capsules, is commonly called *kelp*, and frequent in most parts of Europe. but rare in Jamaica. When burnt, it yields that concreted saline mass, of which our black or coarse glass is chiefly made.—*Browne*.

5. TRIQUETER. THREE-SIDED.

Fond two edged, branched; leaves petioled, denticulat; vesiclese immersed, oblong, three-sided.

II. ULVA.

GEN. CHAR.—Fond membranaceous or gelatinous; fructification solitary or clustered, within

within the substance, or under the cuticle of the whole frond. Three species have been found in Jamaica.

1. PAVONIA. PEACOCK.

Membranaceous brevis, lobatus, circulis, concentricis notatus. Sloane, v. 1, p. 62.—*Fucus maritimus gallo pavonis pennas referens.* Browne, p. 71.

Flat, kidney-form, tapering to the base, with transverse arched lines.

The membranous ash-coloured dwarf *fucus* is a small plant which grows very near the shores in all the bays of Jamaica, it seldom rises above three or four inches, and sticks by a strong ligamentous footstalk to every rock and smaller pebble.—*Browne.* It is sometimes incrustated with a coralline white matter.

2. LACTUCA. LETTICE.

Alga latifolia prima sive muscus marinus lactuce folio. Sloane, v. 1, p. 62.

Fronds many from the same base, distinct, oblong, flat, somewhat undulate, tapering below, dilated upwards, laciniate.

This is commonly thrown up on all the shores of the island. There are two sorts of this plant. The *first* sort hath a dark greenish woody stalk, rising from fibrous roots about three feet high, having many small stalks coming out on each side; and upon each stalk come out eight or nine leaves, without any manner of foot-stalk, opposite to one another, about two inches long, and half an inch broad where broadest, which is towards the stalk, and then goes off tapering with a sharp point; at the end of the branches come out its flowers, which are pentapetalous, and of a yellow colour; after the flowers come small flat slender pods, from four to six inches long, which, when ripe, grow brown, and open; their seeds are a little bigger than lentils. It flowers and bears seed all the year. The *second* sort grows much like the former in most respects, only is a little smaller, and the leaves round instead of being pointed at the ends. The root is powerful against poison; the seed, bruised and mixed with vinegar, prevails against ring-worms. The whole plant is cooling and cleansing, and therefore good in ulcers; steeped as you do indigo, it will afford a blackish-blue muddy substance, which is excellent for the galled back of a horse, and other sores. It is called by some, wild indigo.—*Barham*, p. 123.

3. MONTANA. MOUNTAIN.

Flat, coriaceous, terrestrial, sanguineous. Swartz discovered this species, which is a native of the Blue Mountains, the leaf is kidney-shaped, sessile, zones aggregate, below hoary.

III. BYSSUS.

GEN. CHAR.—Filaments or fibres thin, membranous, woolly, sprinkled externally with grains of fructification.

SANGUINEA. SCARLET.

Capillary, velvety, perennial, scarlet, attached to the bark of trees.

This genus is the last in the scale of vegetation in the class cryptogamia, it appears in the form of threads or meal on the bark of trees or on rotten wood, rocks, damp banks.

banks, and walls. One sort is common on wine-casks, which at first is like flakes of snow, but turns yellow, and at last like a mouses skin: in this state it has black grains at the base, like gunpowder, rots the cask, and is excellent to staunch blood.—*Lightfoot.*

No English Name.

SECURIDACA.

CL. 17, OR. 3.—*Diadelphia decandria.*

NAT. OR.—*Papilionaceæ.*

So named from the Latin word for a bill-hook, *securis*, which the pod resembles in shape.

GEN. CHAR.—Calyx a three-leaved perianth, small, deciduous, leaflets ovate, coloured; the uppermost respecting the standard and two the keel; corolla papilionaceous, with the standard two-leaved within the wings; stamens eight filaments, with oblong anthers; the pistil has an ovate germ, ending in an awl-shaped style; and a flat widening stigma, toothed at the tip; the pericarp an ovate legume, one-celled, one-seeded, ending in a ligulate wing. Two species are natives of Jamaica.

1. SCANDENS. CLIMBING.

Scandens, foliis oblongis, spicis ramosis. Browne, p. 283.

Stems climbing, leaves oblong-ovate.

This is a shrubby succulent plant; the younger leafy branchlets are changed into very strong tendrils; leaves oblong-ovate, obtuse, quite entire, smooth, alternate, petioled; racemes loose, lateral, opposite to the leaves; flowers without scent, red, with the standard acute, the wings oblong and attenuated at the base, and a wide appendix to the keel. *Jacquin.* Browne says he found this plant in the Red Hills.

2. VIRGATA. TWIGGY

Fruticosa, foliis subrotundis, ramulis tenuissimis, spicis laxis terminalibus. Browne, p. 287.

Stem climbing, branches rod-like, leaves roundish.

Neither of these plants are common. Browne found this species in the parish of St. James, growing upright, and divided into a number of very delicate spreading branches.

SEDGE.

CAREX.

CL. 21, OR. 3.—*Monœcia triandria*

NAT. OR.—*Calamariæ.*

GEN. CHAR.—Male ament imbricate, scales one-flowered; calyx one-leaved; no corolla; stamens three, bristle-shaped, with long anthers. Female nectary inflated, three-toothed; the pistil has a three-sided germ, a short style, and three stigmas; seed single, three-sided. Of this numerous genus Swartz found only one species in Jamaica.

HAMATA.

HAMATA

HOOKED.

Spikes simple, androgynous, linear; male at top; females awned, awns hooked at the tip and equal. *Sw.*

See BOG-RUSH, and the following article.

SEDGES.

CYPERUS.

CL. 3, OR. 1.—*Triandria monogynia.*

NAT. OR.....*Calamariæ.*

GEN. CHAR.—*See* Adrue, v. 1, p. 8. Ten other species are natives of Jamaica.

The first species has a round culm.

1. MINIMUS

SMALL

Gramen cyperoides minimum, spicis pluribus compactis ex oblongo rotundis. *Sl.*, v. 1, p. 120, t. 79, f. 3. *Pratensis minor paniculis conglobatis, spicillis compressis distiche imbricatis.* *Browne*, p. 127, C. 1.

Culm capillary, spike single and double, involucre one-leaved.

Roots composed of many capillary brown fibres, whence arise many small narrow leaves, an inch long and reddish underneath; stalks many, simple, triangular, from three to four inches high, with two or three small short leaves towards the top: above these usually three small rusty scaly spikes or heads, two whereof have short peduncles, and the other none; they are sufficiently distinguished by their smallness. *Sloane.* The smallest grassy cyperus, or sedge, is common in the lower lands of Jamaica, and seldom rises more than nine or ten inches above the ground. Its outward panicles stand upon footstalks, but the middle one is largest, and fixed to the end of the stem; each, however, is composed of a number of small compressed spicillæ that stand in a radiated form. *Browne.*

The following have three-sided culms.

2. MONOSTACHYOS.

SINGLE-SPIKED.

Gramen cyperoides minimum, spica simplici compacta, radice tuberosa odorata. *Sloane*, v. 1, p. 120, t. 79, f. 2.

Culm naked; spike simple, ovate, terminal, with mucronate scales.

Root leaves numerous, linear, very narrow, even, loose, a span length. Culm filiform, weak, scarcely a foot high. Spike imbricate, compressed a little, even, the size of a cucumber-seed, with keeled mucronate scales. A subulate leaflet, sometimes two, under the spike, and of the same length with it. *Linneus.* This, according to *Swartz*, is rather the lowest glume, not longer than half the spike, which he describes as being imbricate in a double row, with the two lowest scales longer than the others, linear, awl-shaped, keeled, the others broader, the uppermost acuminate; there are little bristles between the scales near the keel. Germ three-cornered; style three-sided, trifid at the end, stigmas reflex, seed white, callose with dots. *Sloane* says this small grass has brown fibres coming from a black tuberos body, covered with a brown membrane, white within, and very odoriferous; that the seeds are black and shining. It grew in sea-marshes at Delacree pen in Liguanea.

3. FILIFORMIS. FILIFORM.

Culm three-sided, naked, filiform; leaves setaceous, spikes terminal, sessile, crowded, round-subulate. Sw.

4. CONFERTUS. CLOSE.

Culm naked; umbel simple, leafy; spikelets ovate, conglomerate; glumes recurved, and pointed at the tip. Sw.

5. VISCOSUS. CLAMMY.

Odoratus viscosus, subteres maritimus, spicillis compressis conglobatis et radialis. Browne, p. 129.

Culm three-sided, clammy; leaves rough, triangular at the tip.

This grows in many savannas in great plenty, as also near the sea, and has a strong but agreeable smell. It grows to the height of two feet or better. The clamminess of the leaves renders it very remarkable, both they and the stem appearing as if they had been dipped in thin turpentine or balsam, which does not harden or become dry in the hottest weather.

6. ELEGANS. ELEGANT.

Cyperus, panicula maxime sparsa, ferruginea compressa, elegantissima. Sloane, v. 1, p. 117, t. 75, f. 1. *Major umbellatus, paniculis laxis, spicillis teretibus, culmo triquetro.* Browne, p. 128. C. 4.

Culm naked, umbel leafy, peduncles naked proliferous, spikes crowded, with spreading points.

Root-leaves from two to three feet and an half in length; stalk two feet and a half high, with two or three leaves on the top, one whereof is a foot long. Panicle very sparse and elegant, made up of many spikes, some on peduncles three or four inches long, some on none, and others of all intermediate lengths; spikes compressed, broad, one-third of an inch in length, made up of two rows of ferruginous imbricate scales. It grew in sea-marshes on Delacree pen, Liguanea. Sloane.

7. ODORATUS. ODOROUS.

Cyperus longus odoratus, panicula sparsa, spicis strigosioribus viridibus. Sloane, v. 1. p. 116, t. 74, f. 1. and t. 8, f. 1. *Maximus assurgens, culmo rotundiori, panicula sparsa quandoque monstrosa; spicillis compressis distiche imbricatis.* Browne, p. 128. C. 3.

Culm naked, umbel decomposed, simply leafy, pedicels spiked in a double row.

Root long, roundish, frequently jointed, reddish on the outside, very odoriferous, creeping, and making a large tuft, whence rise many leaves with a prominent sharp cutting keel. Stalks two or three feet high, with several smaller leaves towards the top under the panicle, which is very sparse, having, besides some shorter spikes, many on peduncles, above small leaves, some whereof are a foot high, each of the spikes being long, very small, roundish, pale green: seed oblong, of a pale yellowish colour. It grows by river sides. Sloane. The largest foliaceous cyperus grows in all the lowlands near the Caymannas, rising five feet or more. It seeds but seldom; but, in the room of these, it bears a large foliated top that is divided and subdivided into two or three

three series of umbels, each growing gradually smaller as they rise towards the summit, where every little radius ends in a few leaves. *Browne*.

8. COMPRESSUS. COMPRESSED.

Cyperus rotundus gramineus fere inodorus, panicula sparsa compressa viridi. Sloane, v. 1, p. 117, t. 76, f. 1.

Culm naked, universal umbel three-leaved, glumes mucronate, with the sides membranaceous.

Culm in a tuft, half a foot high or less, three-sided, naked; leaves from the base of the culm, linear, straight, stiff, even; involucre terminating, three-leaved; leaflets spreading, linear, keeled. Umbel decomposed; spikelets sessile, pale green, peduncles very short, three or four, three-sided, sheathed at the base. Spikes imbricate in two rows; glumes compressed, keeled, membranaceous at the edge, ovate, acute, but not mucronate; bristles two, whitish, between the scales; anthers bifid, style trifid, stigmas reflex; seed roundish, three-cornered, ferruginous, and shining. *Swartz*. Sloane says it grew in sandy places about the streets of Spanish-Town, and the Savanna.

STRIGOSUS. RIGID.

Cyperus rotundus, panicula sparsa, spicis strigosus ferrugineis. Sloane, v. 1. p. 116, t. 74, f. 2, 3.

Culm naked, umbel simple, spikelets linear, very much crowded, horizontal.

Root round, tuberous, as big as a hazel nut, fibrous, within odoriferous and aromatic to smell and taste, covered with dry red membranes. Leaves soft, triangular, grassy, about eighteen inches long; culm the same height, solid, triangular, having at top three or four leaves, and above several long ferruginous spikes, standing sparse on every hand, each being long, round, slender, containing many long, whitish, cornered, seeds, making in all a very elegant head. It grew in marshes by the Rio-Cobre, above the Ferry, towards the fresh water lagoon, plentifully. The powder of it, to the weight of a crown, taken in white wine, occasions speedy delivery. *Sloane*.

10. TENUIS. SLENDER.

Culm naked, umbel simple; spikelets subulate, crowded, horizontal-reflected; leaves of the involucre linear setaceous. *Sw*.

See ADRUE.

SELF-HEAL.—See CHRISTMAS-PRIDE.

SEMPERVIVE.—See ALOE.

SENNA, BASTARD.—See BARBADOES-PRIDE and BASTARD SENNA.

SENNA TREES.

CASSIA.

CL. 10, OR. 1 — *Decandria monogynia.* NAT. OR.—*Lomentaceæ*.

GEN. CHAR: — See Cane-piece Sensitive, p. 151. Besides the species referred to under their common names, the following are indigenous to Jamaica:

X 2

1. VIMINEA

1. VIMINEA. TWIGGY.

Senna spuria tetraphylla, siliqua lata compressa. Sloane, v. 2, p. 49, t. 180, f. 6, 7. *Viminea foliis ovato-acuminatis, bijugatis; racemis laxis alaribus, siliquis brevioribus compressis.* Browne, p. 223.

Leaflets two pairs, ovate-oblong, acuminate, an oblong gland between the lowest; spines sub-petioled, obsolete, three-toothed.

Stem shrubby, climbing to the height of forty or fifty feet, striated, stiff; branches divaricate, loose, stiffish, round, striated, smooth. Leaves bijugous, leaflets petioled, the lower pair spreading, bent down, the end one bent down perpendicularly, and approximating, all entire, nerved, veined, very smooth. General petioles thickened at the base, round, usually directed one way. Between the petioles of the lower pair is a linear, oblong, erect, brown, gland. On the adult and old branches there are spines. Racemes axillary, stiff, spreading, many-flowered, striated; flowers large, on peduncles longer than them. Leaflets of the calyx ovate, reflex, spreading, small, pale green. Petals unequal, the four upper ones smaller, ovate, with claws, the fifth lower, largish, concave; the three hinder filaments barren, six smaller shorter, fertile; the tenth larger, and bent down below the pistil; anthers oblong, beaked; germ pedicelled, linear, longer than the corolla, bent down, and curved back; style subulate; legume short compressed. Native of Jamaica, in the woods of the higher mountains, in the interior of the island.—Swartz. In plants sixteen feet high, Sloane says the stem of the plant was as thick as one's arm, with a brown, shining, smooth, bark; he found it on the red-hills, on the road to Guanaboa.

2. EMARGINATA. EMARGINATE.

Cassia minor fruticosa hexaphylla senna foliis. Sloane, v. 2, p. 44, t. 18, f. 1, 2, 3, 4. *Arborescens diffusa, siliquis longis compressis.* Browne, p. 223.

Leaflets three or four pairs, ovate, almost entire, flowers in racemes, irregular, stem arboreous.

This is a small tree, with a trunk ten or twelve feet high, and subdivided, round, ash-coloured, pubescent, branches; leaves pinnate, scattered, spreading; common petioles round, two inches long, pubescent; leaflets petioled, blunt, nerved, thickish, tomentose, hoary beneath. Racemes axillary, solitary, patulous, shorter than the leaves, many-flowered; flowers terminating, peduncled, yellow; peduncles one-flowered short. Three leaflets of the calyx larger, ovate-oblong, patulous, concave-arched, pubescent on the outside; petals unequal, four with claws oblong, almost of a size, but the lower ones somewhat smaller; the upper petal with a claw, larger, irregular, in form of the letter S placed obliquely, concave, waved on the edge. Filaments very short, equal, subulate; anthers the length of the filaments, thick, curved in, fertile; germ pedicelled, subulate, declined; style rising, stigma blunt; legume flat, broad. It flowers in spring and the seed ripens in August. Native of Jamaica in dry coppices in the southern part.—Swartz. This is known by the name of senna tree, and is common in the lowlands; the leaves are of a purgative nature, and sometimes used instead of those of the real senna.

3. OBTUSIFOLIA. OBTUSE-LEAVED.

Senna minor herbacea plerumq; hexaphylla folio obtusa. Sloane, v. 2, p. 47, t. 180, f. 5.

Leaflets

Leaflets three pairs obovate blunt.

Height from one to two feet; stem solitary, straight, round, green, smooth, the size of the little finger below, branching from the very bottom; lower leaflets large, smaller, resembling Italian senna, enlarging toward the end, obtuse, but ending in a very short point, covered with a fine down, perceptible to the touch rather than the sight; at the base of the petiole a slender stipule on each side. Both leaves and stems have a strong smell; the upper part of the stem and branches downy. Flowers axillary, few, small, nodding, pale yellow.—*Dillenius*. The leaves have no odd leaflet; petioles alternate, spreading, roundish, thickened at the base, channelled in the middle, even. Leaflets sub-sessile, entire; between the lowest pair a minute yellow, linear gland, on a short petiole. Peduncles solitary, shorter than the petioles, two-flowered; pedicels quadrangular, three times as long as the peduncles. Leaflets of the calyx ovate, two longer, convex, hairy at the edge; petals nearly equal with claws; the three upper ones spreading, the two lower contiguous, rather smaller. The four upper filaments minute, barren, without anthers; four middle larger, fertile, two lower bent down; anthers perforate at the top. Germ oblong, acuminate; style subulate, recurved; stigma simple, pubescent; legume pedicelled, linear, four or five inches long, cylindric-angular, curved, even, containing from twenty to twenty-four seeds.—*Sw*. This plant is common in all the savannas about Kingston, as it is also about Spanish-Town; and a very troublesome weed in the pens in Salt-Ponds. It flowers in October, sheds its seeds, and dies away. It often grows in thick clusters, and destroys all other vegetation in those spots where it has established itself, and ought to be eradicated with great care. It shuts up its leaves at night.

4. PILOSA. HAIRY.

Suffruticosa erecta hirsuta, floribus singularibus, alaribus. Browne, p. 224, C. 12.

Leaflets four or five pairs, with very minute glands, stipules semi-cordate, acuminate, stem stiff, hairy.

Stem from one to two feet high, herbaceous, subdivided, upright, round, hirsute, reddish; branches short almost upright. Leaflets opposite sub-sessile, oblong, rounded at the tip, sharp, with a very small bristle, fixed obliquely to the petiolule, veined, a little hirsute on the edge. Common petioles thicker at the base, round, hirsute; glands extremely minute, pedicelled, concealed in the hairs under the lowest pinnae. Stipules opposite, sessile, sickle-shaped, acuminate, entire, hirsute. Flowers two or three together, axillary, small, yellow; peduncles filiform, long, one-flowered, smooth, purplish; bracts two, whitish, under the flowers; calycine leaflets lanceolate, spreading; petals nearly equal, roundish, with claws, concave, waved about the edge; filaments seven, two of them minute, barren; anthers linear, white, bearing pollen at the tip; germ oblong-lanceolate, villose, white; style cylindric, thick, recurved; stigma simple obtuse; legume sub-cylindric, linear, pedicelled, pubescent. Native of Jamaica, flowering towards the end of the year.—*Swartz*.

5. BIFLORA. TWO-FLOWERED.

Fruticosa, foliis minoribus obverse ovatis sessugatis, floribus geminatis vel bigeminatis, racemis alaribus. Browne, p. 223, C. 6.

Leaflets six pairs rather oblong smooth, the lower ones smaller, a subulate gland between the lowest, pedicels two-flowered.

Thunb.

This is about two feet high. Leaflets oval-oblong, blunt, with a very small bristle-shaped point. Flowers yellow; pods linear compressed. Browne calls it the flowering shrubby senna.

6. SERPENS. SERPENT.

Herbacea, tenuissima, procumbens; floribus singularibus alaribus.
Browne, p. 225, C. 15.

Leaflets seven pairs, flowers pentandrous, stems filiform, prostrate, herbaceous.

Stems three or four inches long, simple, somewhat upright, but depressed at the base, stiff, round, villose. Leaflets from seven to nine pairs, opposite, somewhat sickle shaped, sessile, approximating, flat, oblique, terminated by a very short bristle, and somewhat villose; common petioles filiform, short, thickened at the base, round, hirsute. Beneath the lowest pair of leaflets are two flat, sessile, roundish, perforated, red glands. At the base of the petioles is a pair of stipules, opposite, oblique, lanceolate, acuminate, almost bristle shaped at the tip. Flowers not axillary, but crowded above the petioles, small, yellow, on very short pedicels. Calycine leaflets lanceolate, spreading; petals unequal, ovate, obtuse, concave, spreading; filaments very short, anthers linear, fertile; the three anterior ones bent down, and somewhat larger; germ compressed oblong; style thickish; stigma blunt, pubescent; legume flat, compressed, of a broad linear shape, margined, blunt, villose, containing many seeds.—Sw. This is an annual plant in dry pastures, creeping among the grass; its stalk weakly, not bigger than a middle sized pin, stretching from fourteen to sixteen inches.

7. GLANDULOSA. GIANDULOUS

Leaflets many pairs, with many glands, stipules subulate.

Stem suffruticose, with almost naked branches; leaflets lanceolate, with a pedicelled gland on the petiole between each pair; peduncles axillary, double, one-flowered, shorter than the leaf. The flowers have six filaments, and two of the anthers are very long; the pods are like those of orobus. *Linneus.*

8. FLEXUOSA. FLEXUOUS.

Senna occidentalis siliqua singulari foliis herbae mimosæ. Sl. v. 2. p. 51.

Leaflets many pairs, stipules half cordate.

Root woody; stems spread on the ground, four or five inches long, with winged leaves, the pinnæ of which are pretty long. The flowers are axillary, pods flat and about half an inch long. It grows in sandy places of the savanna near St. Jago de la Vega. *Sloane.*

9. PROCUMBENS. PROCUMBENT.

Leaflets many pairs, without glands, stem procumbent.

10. VIRGATA. TWIGGY.

Leaflets ten pairs, ovate-lanceolate, villose, a petiolar pedicelled gland, peduncles one-flowered, longer than the leaves. *Sw.*

11. SERICEA. SILKY.

Leaflets about four pairs, ovate, hirsute; a subulate gland between the leaflets, peduncles four-flowered, legumes four-cornered. *Sw.*

12. LINEATA.

12. LINEATA. LINEAR.

Leaflets five pairs, somewhat long, pubescent beneath, equal; an obsolete gland beneath the lowest; peduncles one-flowered.

13. SENNA.

Senna Italica seu foliis obtusis. Sloane, v. 2, p. 47.

Leaflets four to six pairs, sub-ovate, petioles without glands.

This is the plant which produces the leaves commonly known in medicine by the name of senna. Swartz found it on the coast of this island, of which, however, it is not a native, although long ago introduced, and it is probable that Sloane's plant is only a variety. Swartz describes it as follows:—Stem shrubby, branched, even, with sub-divided branches; leaves composed of five, seldom six, pairs of leaflets; common petioles alternate, round, thickened at the base; leaflets opposite, oblong, rounded at the tip, where there is a very short bristle, veined, glaucous, on very short petioles; stipules at the base of the common petiole, opposite, acuminate. Racemes terminating, erect, many-flowered, the flowers on short peduncles, bent down, pale yellow; calycine leaflets lanceolate; petals convex, patulous; three filaments superior, four middle smaller, three inferior; anthers of the superior filaments large, of the middle ones small, of the lower ones barren; germ lanceolate, style incurved, stigma acute; legume shaped like the stomach, pedicelled, winged on each side for each seed, the lower margin crenate; seeds eight, oblong, compressed.—All the species of cassia are purgative, and the leaves, bruised and rubbed on the skin, are good for cutaneous complaints. This plant, which grew on banks near the sea, was employed by Dr. Wright as a cathartic.

See CANE-PIECE SENSITIVE, CASSIA-STICK-TREE, HORSE-CASSIA, RINGWORM-SHRUB, and STINKING WEED.

SENSITIVE PLANTS.

MIMOSA.

CL. 23, OR. 1.—*Polygamia monœcia.*

NAT. OR.—*Lomentaceæ.*

GEN. CHAR.—See Cocoons, p. 137. Besides the species of this genus referred to under English names, the following are also natives of Jamaica:

1. VIVA. LIVELY.

Mimosa herbacea, non spinosa, minima, repens. Sloane, v. 2, p. 58, t. 182, f. 7. *Minima herbacea, viri tripolicaris; capsulis monospermibus hirsutis.* Browne. p. 254. M. 13.

Unarmed, leaves conjugate pinnate, in most pinnae smaller.

This has trailing herbaceous stalks, putting out roots at every joint, and spreading to a considerable distance. The leaflets are narrow and the petioles short and smooth. Flowers axillary on naked peduncles, about an inch in length; they are of a pale yellowish colour, and collected into small globular heads; legumes short, flat, jointed, containing three or four compressed roundish seeds. *Martyn.*—The smallest creeping sensitive is frequent in many of the pastures in Jamaica, especially those situated at the foot of the mountains in Sixteen-mile-walk and St. Thomas in the East. It grows in beds,

beds, and creeps by very delicate stalks along the ground; but these seldom exceed three or four inches long. It is very sensitive, and contracts its leaves on the slightest touch, or even sudden puff of wind. Sloane relates that a puff of breath makes an impression on it, and that he wrote his name on a bed of it with the point of a stick, and it remained visible for some time.

2. CINERARIA. ASH-COLOURED

Fruticosa spinis aduncis undique armata; cortice cinereo, foliis minutis pinnatis, spicis globosis. Browne, p. 252. M. 5.

Prickly, leaves conjugate pinnate, pinnae equal, prickles curved inwards.

The fingrigo or thorny mimosa is a prickly shrub, frequent in most of the sugar colonies, especially in Antigua, where the leaves are frequently used, mixed with corn, for their riding horses, and it is thought to free them from bots and worms. It grows in a tufted form, and seldom rises above five or six feet from the ground, though it spreads a great deal more in its growth. *Browne.*

3. PUNCTATA. SPOTTED.

Frutescens media inermis, siliquis compressis, falcatis et umbellatis, pedunculo longissimo. Browne, p. 253, M. 8.

Unarmed, leaves bipinnate, spikes erect, flowers ten-stamened, lower ones castrated.

This rises with upright branching stalks six or seven feet high; woody towards the root, having callous dots irregularly disposed on it. The leaves are four haired, with a depressed gland between the first pair; leaflets twenty-paired; peduncles with two, alternate, half-cordate, bractes; spikes oblong; all the florets ten-stamened; the lower ones male and castrated; corolla five-petaled. Browne calls it the larger smooth sensitive, and says that it has been introduced into Jamaica.

4. PERNAMBUCANA. PERNAMBUCO.

Herba mimosa non spinosa, seu spuria de Pernambuco. Sloane, v. 2. p. 58.

Unarmed, leaves bipinnate, spikes drooping, five stamened, lower ones castrated, stem decumbent.

From a straight woody root proceed several branches nine inches long. Leaves composed of three or four pinnae. The flowers are globose, made up of many long white filaments, forming altogether a round head; pods flat, an inch long, and a quarter of an inch broad, with a round protuberance at each seed. It does not feel the touch as other mimosas, but on holding it for some time its leaves contract. It grows on gravelly grounds in the savanna, near St. Jago de la Vega, and many other places. *Sloane.*

5. COMOSA. BRANCHY.

Unarmed, arboreous, leaves bi-pinnate trijugous, pinnae (nine or ten-paired) oval retuse at the base, flowers paniced, monodelphous. *Sw.*

6. MANGENSIS. MANGO.

Spines solitary, short; leaves bi-pinnate, generally nine-paired; spikes globular; axillary, solitary.

This

This is an upright tree, twenty feet in height, with horizontal branches. Spines awl-shaped, acuminate, strong, sub axillary, five-lined; leaves axillary, with the common petioles two inches long, and a small oblong, blunt, upright, gland, a little above the base; partial pinnae an inch long; leaflets oblong, blunt, scarcely three lines in length; spikes globular, axillary, solitary, turned upwards, on a peduncle an inch in length; flowers white, void of scent. Native of Jamaica and other West-India islands; frequent in the island of Mango.—*Jacquin*.

7. ASPERATA. ROUGH.

Frutescens, spinosa et acuelata; siliquis hirsutis. Browne, p. 253, M. 11.

Prickly, rough-haired, leaves bi-pinnate, with opposite prickles, spine erect between each of the partial ones.

This has a shrubby erect stalk about five feet high, hairy, and armed with short, broad, strong, thorns, which are white, standing on each side, almost opposite or alternate. Leaves five or six paired, with a strong mid rib, and between each pair two short strong spines, pointing out each way; leaflets extremely narrow and very close. Towards the upper part of the stalk the flowers are produced from the sides, on short peduncles; they are collected into globular heads, and are of a bright purple colour; the stalks are also terminated by smaller heads of the like flowers. Pods flat, jointed, about two inches long and a quarter of an inch broad, spreading like rays, there being commonly five or six joined together at the base; they separate at each articulation, leaving the two side membranes or borders standing. The seeds, which are compressed and square, drop out from the joints of the pods, which are hairy at first; but as they ripen become smooth. The petioles do not fall on being touched, but the leaflets close up. Linneus remarks that the whole plant is rough-haired, except the pinnae; the leaves often fourteen paired, with many paired leaflets; an upright awl-shaped spine between each pair of partial leaves; and two stout recurved solitary opposite shorter prickles between each pair of partial ones. Legume compressed, with stiffish pale red hairs. Browne calls it the thorned sensitive from Panama, which he says was introduced from the main continent. He describes it as follows: "It is a shrubby plant, and rises commonly to the height of seven or eight feet, but the smaller branches and ribs are full of short recurved thorns; and each rib again emits a number of long and slender prickles, from the interspaces of its foliations, or smallest ribs. The branches of this shrub are moderately thick, but the leaves are small, and very apt to move on every occasion. The pods are compressed and hairy, and when ripe divide into as many parts as there are seeds, which fall off separately; these parts are held, in the natural state, between two ribs that run along the margins of the pod, in the inner grooves of which they move with great ease, when contracted and detached from each other".

See CACoon, CASHAW, GUM-ARABIC, INGA-TREE, NEPHRITIC-TREE, and WILD TAMARIND.

SENSITIVE, BASTARD.—See BASTARD SENSITIVE.

SERPENT-ROOT

OPHIORHIZA.

CL. 5, OR. 1.—*Pentandria monogynia.*

NAT. OR.—*Stellate.*

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This

This generic name is derived from the Greek words for the English name, an East-India species being used against the bite of the ribband snake.

GEN. CHAR.—Calyx a one-leafed perianth, erect, compressed, five toothed, equal, permanent; corolla one-petaled, funnel-form, border five-cleft; stamens five filaments, with oblong anthers; the pistil has a bifid germ, a filiform style, and two stigmas; the pericarp is a two-lobed capsule, seeds numerous. One species has been found in Jamaica.

MITREOLA.

MITRED.

Leaves ovate.

Roots from the lower joints of the stem in bundles, long, filiform, white; stem herbaceous, a foot high, simple or branched, erect, four-cornered at bottom, towards the upper part roundish, smooth, loose. Leaves petioled, opposite, lanceolate-ovate, acuminate, entire, smooth on both sides; leaflets in the axils of the larger ones. Peduncles terminating, dichotomous, loose; flowers minute, sessile, directed one way, distinct, white, and a solitary flower in the forks of the peduncles. Calyx minute, five-parted, with erect segments; corolla tubular, longer than the calyx; segments of the border ovate, acute, erect, often bent in; throat villose, white; filaments from the middle of the tube; anthers converging under the pile of hairs above the stigmas; germ two-parted at the base, oblong; styles two, stigmas roundish, white, pubescent; capsule at the base bifid, one-celled, two-valved, the valves opening at the side within longitudinally; seeds numerous, inserted into two receptacles fastened to each valve. Flowering in Spring, in wet meadows or the banks of rivers. Swartz. This plant has the appearance of the narrow leaved brooklime. The leaves are of a pale green colour like those of the Barbadoes olive.

SERPENT'S OR ADDER'S TONGUE.

OPHIOGLOSSUM.

CL. 24, OR. 2.—*Cryptogamia Filices*.

This generic name is formed of the Greek words for the English one.

GEN. CHAR.—Capsules numerous, connected by a membrane into a distinct spike, sub-globular, when ripe opening transversely, without any elastic ring. Seeds very many, extremely minute. Three species are natives of Jamaica.

1. RETICULATUM.

NETTED.

Spicatum simplex, folio cordato, Browne, p. 108.

Fronde cordate.

The heart-leaved adder's tongue rises commonly to the height of five or six inches above the root.

2. PALMATUM.

PALMATE.

Fronde bisecta palmata, spica centrali fronde longiori. Browne, p. 108.

Fronde palmate, with the spike at the base.

Browne calls this the smaller adder's tongue, with palmated foliage.

3. SCANDENS.

3. SCANDENS. CLIMBING.

Phyllitidi multifidæ affinis, filix scandens, in pinnas tantum divisa, oblongas, angustas non crenatas. Sloane, v. 1, p. 88, t. 46, f. 1. Scandens, caule tereti glabro, foliis petiolatis angustis subserrulatis, quandoque auritis, quandoque digitatis. Browne, p. 100, Pl. 24.

Stem flexuose round, fronds conjugate pinnate, leaflets spike-bearing on both sides.

This has a round root, its top covered with blackish hair, having many strong filaments. Stem round, smooth, small, shining, reddish brown, turning round trees, on which it rises to a considerable height. At every three or four inches it puts forth leaves, mostly opposite, on inch-long foot-stalks, of a nervous texture, and sometimes divided into two or more unequal parts. It grew plentifully on Mount-Diablo and other inland mountain parts. *Sloane.*

SERPENT-WITHE—See CONTRAYERVA.

SEVEN-EAR VINE—See INDIAN CREEPER.

SHADDOCK.

CITRUS.

CL. 18, OR 3.—*Polyadelphia icosandria.*

NAT. OR.—*Bicornes.*

GEN. CHAR.—See Citron, p. 196.

DECUMANA.

Malus aurantia, fructu rotundo maximo pallescente humanum caput excedente. Sloane, v. 1, p. 41, t. 12, f. 2, 3. Fructu sphaerico ovato, maximo; cortice æquali, vesiculato, pallide luteo. Br. p. 309.

Petioles winged, leaves obtuse, emarginate.

The shaddock was originally regarded by Linneus as only a variety of the orange, from which it principally differs in the size of the fruit. It grows much the same size as the orange tree, and has much the same appearance in foliage and flowers, which are very sweet scented. The fruit is large and spherical, and from eight to ten inches in diameter; some trees have fruit with a red, and others with a white, pulp, the former is generally considered the best. The rind is very thick, white, bitter, and fungous. The pulp of the best kinds has a most delicious sweet-acid taste, by many preferred to the orange. There is a variety known by the name of *grape-fruit*, on account of its resemblance in flavour to the grape; this fruit is not near so large as the shaddock, which received its name from a captain Shaddock, who first brought the plant from the East-Indies. These fruits are generally in perfection, in Jamaica, in the month of December.

I have seen them much larger than a man's head. The outside skin is of a lemon colour, but very smooth, and of a fine scent, exceeding lemon or orange; its rind is thick, and full of a volatile essential oil; next the inside skin is a white substance, as in citrons, and then a juicy pulp appears. Those of the best sort are of a deep red or purple colour, but those that are white are very sour, and not good.* They say if

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you

* This is not always the case, for the white are sometimes very juicy and well flavoured.

you plant the seed, there is but one in a whole shaddock that will bring forth good and pleasant fruit; I have seen many of them planted and come to bear, but never saw a good one produced from the seed. The best way is to take a stem or a twig, and ingraft or inoculate it on a good China orange stock, &c. The fruit is cooling and refreshing, abating drought and heat in fevers.—*Barham*, p. 173.

The shaddocks in general are but indifferent fruit, most of them inclining to a white pulp or flesh, and a watery bitterish juice, greatly inferior to the East-India fruit. Mr. Miller accounts for this, by remarking, that by constantly raising these trees from the seeds, the fruit degenerates continually; whereas if the inhabitants would only bud or inoculate from the good sort, they might have it in as great plenty as they pleased; but that they resign the whole to nature, seldom giving themselves any further trouble than to put the seeds in the ground, and leave them to grow as nature shall incline. This observation of his is perfectly true; and, perhaps, their practice is not so much the effect of carelessness, as the want of knowing how to perform the inoculation; for which reason I shall give the method recommended by that ingenious writer, which is very practicable in Jamaica, and where we may hope to see it adopted; since it is surely some satisfaction to possess so favourite a fruit in its most perfect and delicious state, whether for consumption within the island or for exportation. — The manner of performing the inoculation is as follows: you must be provided with a sharp penknife, having a flat haft, (the use of which is to raise the bark of the stock to admit the bud), and some sound mat, which should be soaked in water to increase its strength, for this purpose various barks used for making ropes will answer equally well. Having taken off the cuttings or young shoots from the trees to be propagated, take a smooth part of the stock, five or six inches above the ground, if designed for dwarfs, but if for standards, they should be budded six feet above the ground; then, with your penknife, cut an horizontal mark across the rind, and, from the middle of that cut, make a slit downwards, about two inches in length, so that it may be in form of a T; but you must be careful not to cut too deep, lest you should wound the stock; then cut off the leaf from the bud, leaving the footstalk, and make a cross cut about half an inch below the eye, and slit off the bud, with part of the wood to it, in form of an escutcheon. This done, pull off with the knife that part of the wood which was taken with the bud, observing whether the eye of the bud be left to it or not, (for all those buds that lose their eyes in stripping should be thrown away, being useless); then, having gently raised the bark of the stock, where the T incision was made, with the flat haft of the knife, clear to the wood, thrust the bud therein, observing to place it smooth between the rind and the wood of the stock, cutting off any part of the rind belonging to the bud which may be too long for the slit made in the stock, and, having exactly fitted the bud to the stock, tie them closely round, beginning at the lower part of the slit, and proceeding to the top, taking care not to bind round the eye of the bud, which should be left open — When the buds have been inoculated two or three weeks, those which remain plump and fresh are joined, and the bandage must be loosened, which, if not done in time, will pinch the stock, and greatly injure, if not destroy, the bud.—*Long*, p. 79.

FORBIDDEN FRUIT.

Fructu sphaerico ovato minore, cortice aequali vesiculato pallide luteo, petiolis a'atis. Browne, p. 309.

This is considered as only a variety of the shaddock, but the fruit is much smaller, having a thin, tough, smooth, pale yellow, rind, and the tree is not near so graceful, having

having its branches generally very scattered and irregular. The fruit of this tree when good, which it seldom is, has a much milder sweet taste than any other of the orange kind. It grows plentifully in a wild state in many parts of Jamaica.

See CITRON—LIME—ORANGE.

SILK COTTON-TREE—See COTTON-TREE.

SILK-GRASS

BROMELIA.

CL. 6, OR. 1.—*Hexandria monogynia*.

NAT. OR.—*Coronarieæ*.

GEN. CHAR.—See Penguin, v. 2, p. 48.

KARATAS

Aloe yucca foliis. Sloane, v. 1, p. 249.

Leaves erect, flowers stemless, sessile, aggregate.

This plant generally grows at the root of some shady tree; it is elegant, and produces numerous radical leaves, all which are of a subulate linear shape, sharp pointed, and edged with spines. The flowers are scentless, seated in the bosom or middle part of the plant, rose-coloured, with the calyx and germ downy. The length of the leaves is six or seven feet. The fruits are oval, two or three hundred in number, and grow sessile in a heap or central groupe, surrounded by paleaceous expanded leaves or bractes; they contain a succulent whitish or yellowish flesh, under a coriaceous and yellowish bark; when ripe, they are far from unpleasant, but, when unripe, they set the teeth on edge and excoriate the mouth. The economy of this plant, in the preservation of its fruit to maturity, is wonderful, being so protected by the spines of the surrounding leaves as to be secure from all injuries. It propagates itself by mucus produced amongst the leaves, which become procumbent, after the fruit is ripened. *Martyn*. Long mentions that some of these plants grew at Wreck-Bay, in Healthshire; Sloane noticed them at the Caymannas.

This plant is of the aloetic kind. The leaf is not so thick and juicy as sempervive, but much longer; some are five or six feet long, but narrow, yet not so narrow as the pine or penguin leaf, nor are they so broad or thick as the currato. It is full of small prickles on each side or edge of the leaf, and is tapering from the ground to the top, ending with a small prickle, which makes it of the shape of a lance.

The chief use of this plant is to make silk; which, as the Indians and negroes make it, is quite coarse, but very white, hard, and strong; of this they make hammocks and ropes, as also fishing-nets, which will endure the water longer than thread. The way that the negroes dress it here, is only to lay the blade, or leaf, upon a flat piece of wood, and then, holding it fast at one end, scrape off, with a blunt lath or piece of wood, the outward green substance, the inward white silk appearing, in straight lines or threads, from one end of the leaf to the other. After they have scraped both sides, they throw it into clear water, wash all the remaining green from it, dry it in the sun, and then twist it up into ropes, &c. Undoubtedly, this might be wonderfully improved. Nature having shewn the way, and brought it to such perfection ready to their hands, it might, with

with industry and the art of man, be perfected much more, to a considerable profit in making fine stuffs of it, and merchandizing in it.—*Barham*, p. 174.

See PENGUIN and PINE-APPLE.

SILVER-WOOD-TREE.

PETALOMA.

CL. 10, OR. 1.—*Decandria monogynia*. NAT. OR.

GEN. CHAR.—Calyx a one-leafed perianth, goblet shaped, five-toothed, superior, permanent, teeth sharp, almost upright; corolla five petals, oblong, spreading, each inserted by the claw between the teeth of the calyx, deciduous; stamens ten filaments, placed on the margin of the calyx, longer than the corolla; anthers oblong, incumbent; the pistil has an ovate germ in the bottom of the calyx, a long awl-shaped style, and a simple acute stigma; the pericarp a globular fleshy berry, crowned with the calyx, one-celled; seeds solitary, or in fours, angular on one side, convex on the other. One species is a native of Jamaica, which was transferred by Swartz from the genus *myrtus*, on account of the form of the calyx, and the insertion of the stamens.

MYRTILLOIDES.

MYRTLE-LIKE.

Myrti foliis arbor cortice argentea foliis oblongis ad basin latioribus acuminatis, inodoris, ex adverso sitis, flore pentapetaloide pallide albicante. Sloane, v. 2, p. 78, t. 187, f. 3.

Peduncles solitary, one-flowered; leaves sub-sessile, ovate, attenuated, oblique at the base.

Trunk straight, twenty feet high, no thicker than the human leg; the bark almost smooth, grey, with some very white spots, whence its name of silver-wood. Leaves in pairs, smooth, very thin, yellowish green, an inch long, and almost as broad at the base, entire, on short petioles. Flowers axillary, small, white, on crooked pedicels; the wood is hard, tough, heavy, and good for looms, handles, staves for oars, or rods for scouring guns. *Sloane*. Browne makes this plant the same as his first *philadelphus*, or silver-tree, which, he says, is commonly called rodwood by the negroes, which cannot be, as his plant has tetrapetalous flowers, and its characters do not agree in other respects with the plant described by Sloane and Swartz, which is an elegant little tree, and sometimes only eight stamens are found in the flower. The ripe fruit is succulent and filled with a fragrant balsamic juice, containing frequently only one small stone, or oblong nut, turbinate at one end. It blossoms in April and May.

SNAKE-GOURD.

TRICHOSANTHES.

CL. 21, OR. 9.—*Monœcia syngenesia*.

NAT. OR.—*Cucurbitaceæ*.

This generic name is derived from two Greek words, signifying hair and a flower.

GEN. CHAR.—Male calyx a one-leafed perianth, five-toothed; corolla five-parted, ciliate, with long branching hairs; stamens three filaments; anthers a cylindric erect

erect body creeping up and down; the pistil has three styles. Female calyx and corolla as in the male; the pistil has an oblong germ, a trifid style, and oblong stigmas; the pericarp an oblong three-celled pome; seeds many, compressed, obtuse, coated. One species has been found in Jamaica.

AMARA.

Foliis denticulatis, quandoque trilobis, quandoque cordatis, fructu sub-rotundo minori. Browne, p. 354.

Pomes turbinate-ovate.

Stems very slender, smooth, green, angular, flexile; joints about two inches distant, with very slender long tendrils, a leaf and often a flower at each; leaves not more than an inch in length, cut, roughish, with small ash-coloured spots and numerous dots scarcely visible on the upper surface, on petioles an inch in length. Flowers white, fringed; fruit in form of a pear, four or five inches long, about an inch and a half thick, smooth, greenish, with longitudinal stripes, of somewhat a brighter colour; pulp very white and bitter; seed abundant, longish, narrow, of a dusky soot ash-colour. *Ray.* Browne says this plant is a native of Jamaica, and grows in the coolest parts of New Liguanea. It grows commonly in other parts of Jamaica, and is said to be poisonous. Mr. A. Robinson says it was used to destroy rats.

SNAKE-WOOD—See BUCK-THORN and TRUMPET-TREE.

SNAP-DRAGON—See SPIRIT-LEAF.

SNOW-BERRY, or DAVID's ROOT.

CHIOCocca.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT. OR.—*Aggregatæ.*

The generic name is composed of the Greek words for snow and berry.

GEN. CHAR.—Calyx a five toothed, superior, permanent, perianth: corolla monopetalous, funnel-form, tube long spreading, border five parted; divisions equal, acute, reflected; stamens five filaments, filiform, length of the corolla; with oblong erect anthers: the pistil has an inferior, roundish, compressed, germ; a filiform style, the length of the stamens; and a simple obtuse stigma: the pericarp is a roundish compressed berry, crowned with the calyx, two-celled; seeds two, roundish, compressed, distant.

RACEMOSA.

RACEMED.

Jasminum forte, folio myrtino, aliorum adminiculo se sustentans flore albicante racemosa. Sloane, v. 2. p. 97, t. 188, f. 3. *Sarmentosa foliis myrtineis oppositis, spicis plurimis tenuissimis et terminalibus et ex alis supremis.* Browne, p. 164.

Scandent, leaves broad-lanceolate, flowers lateral, panicle racemed, one stipular tooth.

Stem a fathom in height and more, with smooth loose branches, spreading out horizontally; leaves petioled, opposite, oblong, acuminate, nerved, glittering on the upper surface, and smooth; stipules minute, acuminate, within the petioles. Racemes axillary.

axillary, opposite to the branchlets, loose, simple, or subdivided, scarcely longer than the leaves, many-flowered; flowers peduncled, usually in pairs, directed one way, pale yellow: calyx small; tube of the corolla ventricose, slightly five-cornered, border five cleft; segments ovate, acute, spreading: filaments short, from the bottom of the corolla, villose; anthers linear, the length of the ventriose tube; style thickening towards the top; stigmas two, blunt; berry snow-white; seeds two, oblong acuminate. This plant is very nearly allied to the genus *psychotria*; but it differs not only in the manner of flowering, which is always in a raceme, but also in the form of the corolla, the berry, and the seeds.—*Sw.*

This plant grows very common in the lower hills of Jamaica, especially those between Spanish-Town and St. Faith's; it begins to branch immediately above the root, rises by many shoots and slender twigs, from four to seven or eight feet, sometimes more; but, when so luxuriant, it requires to be supported by some of the neighbouring shrubs, without which it would not be able to stand. The flower-spikes are very slender and numerous towards the top of the branches, and shoot from them as well as from the axæ of the upper-leaves, or lesser branches; the berries are of a snowy colour, and loose texture, very numerous, and of a round but somewhat compressed figure, each containing two compressed seeds.

The root of the plant has much the same bitter acrid taste with the seneka, snake root, and has been a long time used as a strong resolutive and attenuant in those colonies. I have known it administered with great success in obstinate rheumatisms, and old venereal taints; nor is it entirely useless even in the *spina ventosa*, commonly called bone-ache. I have frequently observed very stubborn complaints eased and sometimes removed by the continued use of this, and a few mercurial alterants; but it is best used in decoctions, which may be made either stronger or weaker, or impregnated with other ingredients, as occasion requires. The smaller the plant grows, the more sharp and biting the root is, and consequently the better.—*Browne.*

Browne also mentions a variety of this species, which he calls the climbing snowberry, *scandens formatis tenuissimis et fere indivisis*. This grew to a considerable height among trees, and threw down some of its slender twigs again to the ground; the leaves very like the foregoing. *Swartz* also observed this plant, and says the leaves are smaller, sub-convex, somewhat rigid, and glittering; the racemes short and simple; the corollas a little larger, pale-coloured, but purple at the corners.

SNOW-DROP-TREE.

CHIONANTHUS.

CL. 2. OR. 1.—*Diandria monogynia.*

NAT. OR.—*Sepiaria.*

This generic name is derived from the Greek words for snow and a flower.

GEN. CHAR.—Calyx a one-leaved four-parted perianth; corolla quadrifid, monopetalous, funnel-form, with the divisions very long; stamens two short filaments with cordate anthers; the pistil has an ovate germ, a simple style, and an obtuse stigma; the pericarp a round drupe, one-celled; seed a striated nut. *Swartz* found one species of this genus in Jamaica.

INCRASSATA

INCRASSATED.

Panicles axillary, trichotomous; all the flowers distinct; anthers obtuse.

This

This grows from five to six feet high; leaves opposite, glabrous, pointed; petals white, concave, ending in a thread; calyx glabrous.

SOAP-BERRY TREE.

SAPINDUS.

CL. 8, OR. 1.—*Octandria monogynia*.

NAT. OR.—*Trihilata*.

GEN. CHAR.—See Licca Tree, v. 1, page 443.

SAPONARIA. SOAPBERRY.

Prunifera racemosa, folio alata, costa media membranulis utrinque extantibus donata, fructu saponario. Sloane, v. 2, p. 131. *Foliis oblongis, vix petiolatis, per costam ample alatam dispositis.* Browne, p. 206.

Unarmed, leaves pinnate, leaflets lanceolate, rachis winged.

Mr. Anthony Robinson, after examining, he says, two forenoons with a microscope, describes the characters of this plant as follow, differing considerably from the general characters of the genus: The calyx is a perianth, consisting of five subovate, concave, and deciduous, green little leaves, placed scale-fashion, two of which are exterior and less than the interior ones; corolla five lanceolate petals, equal, with fimbriated margins, longer than the cup; nectarium eight flat glands, of a triangular make, placed vertically, and forming a salver; the germ trilobous, extremely small, and placed in the centre of the nectarium; the style short and simple; stamens eight equal subulated filaments, hairy, longer than the petals, and placed round the nectarium; anthers five, didymous, and prolific, the other stamens bearing three barred triangular glands. It blossoms in the latter end of the year.

This rises with a woody stem from twenty to thirty feet high, about the thickness of the human thigh, covered with an ash-coloured bark, sending out branches towards the top, garnished with winged leaves, composed of three, four, or five, pairs of spear-shaped leaflets, which are from three to four inches long, and an inch and a quarter broad in the middle, drawing to a point at both ends. The midrib has a membranaceous or leafy border running on each side from one pair of the leaflets to the other, which is broadest in the middle between the leaflets; they are of a pale green colour, and pretty stiff. The flowers are produced in loose spikes at the ends of the branches, small and white, making no great appearance; they are succeeded by oval berries, as large as middling cherries, sometimes single, sometimes two, three, or four, are joined together; they have a saponaceous skin or cover, inclosing a very smooth roundish nut of the same form, and shining black when ripe. This tree is common in all the south side hills in Jamaica. Browne says "the seed-vessels of this plant are very detersive and acrid; they lather freely in water, and are frequently used instead of soap; for a few of them will cleanse more linen than sixty times their weight of that composition; but they are rather too sharp and observed to corrode or burn linen in time, and the water in which the tops or leaves have been steeped or boiled is observed to have the same quality in some degree. The seeds are round and hard, take a fine polish, and are frequently made into buttons. The whole plant, especially the seed capsules, being pounded, and steeped in ponds, rivulets, or creeks, are observed to intoxicate and kill fish." The seeds pounded and infused for some time in proof spirit, the mixture is used

is often used as an embrocation for the removal of rheumatic pains; if thus bruised and steeped in water, for poultry to drink, they are said to prevent them from having the yaws. In Lewis's *Materia Medica*, it is said, "that this fruit is a medicine of singular and specific virtue in chlorosis, and that a tincture or extract is preferable to the berry in substance, whence it may be presumed, that the soapy matter is dissoluble in spirit. Its medicinal virtues were first published by Marloe, in a letter to Mr. Boyle."

They are so called because the cistus or skins that inclose these berries lather in water, and scour like soap. When the hollow cistus or membrane is taken away, there appears a round, smooth, black berry, of which formerly they made buttons in England. This tree very much resembles the common English ashen-tree in bigness, colour of bark, and shape of the leaf; but much differing in the fruit, which is a black round berry, of the bigness of a marble, contained in a skin looking and feeling like a dried bladder, very tough, and which doth not stick close to the berry, but seems to have a space or hollowness all round, which is so tough that you can hardly with your fingers separate one from the other. These skins, soaked in water, and rubbed with your hands, will lather and wash, or scour, as well as any soap, and have no smell. The wood is no lasting timber. I have been told, that the ashes of this tree will spoil a great quantity of other ashes for scouring or making potash; which seems strange, there being such a soapy or scouring quality in the fruit of it.—*Barham*, p. 175.

The *sapindus edulis*, or Litchi Plum was introduced into Jamaica in 1775.

See LICCA TREE.

No English Name.

SOLANDRA.

CL. 5. OR. 1.—*Pentandria monogynia*.

NAT. OR.

This was so named in honour of D. C. Solander, a Swede, and disciple of Linneus, who accompanied Sir Joseph Banks round the world.

GEN. CHAR.—Calyx a one-leafed perianth, large, angular, permanent, three or five cleft; segments lanceolate, erect: corolla one-petaled, funnel-form, very large, tube bell-shaped, ventricose, a little shorter than the calyx; border five-cleft, segments roundish, waved, patulous: stamens five filiform filaments, length of the tube, ascending at the top; anthers oblong, versatile: the pistil has a superior oval germ, a filiform style, longer than the stamens, bent in; stigma obtuse, bifid, segments ovate; the pericarp an oval berry, conical at top, smooth, four-celled; seeds very numerous, oblong, nestling. There is only one species.

GRANDIFLORA.

GREAT-FLOWERED.

This is a small tree from twelve to twenty feet high, with a branching trunk, and a cloven ash-coloured bark, green within; the wood is spongy; the branches are loose, bent down, divaricating, very long; the leaves are in clusters towards the ends of the branchlets, obovate-oblong, acute, quite entire, smooth, thickish, and somewhat succulent, from three to seven inches in length, on round smooth petioles, five times shorter than the leaves. Flowers terminating, subsessile, subsolitary, very large; peduncles very short, thick, round, smooth, one-flowered; calyx from two to three inches long, sub-quinquefid, as the fruit ripens bursting to the base into three or five segments; tube of the corolla greenish white; border ten times shorter than the tube, patulous, pale flesh-colour, somewhat irregular, veined, the opening four inches in diameter.

diameter; segments wide, very bluntly waved, crenulate at the edge, almost equal, the upper ones being scarcely larger. Filaments inserted into the base of the tube, yellow; anthers large, ferruginous; germ smooth; style ascending at the top and yellow; lobes of the stigma roundish, green; very often the size of a hen's egg, but thicker below, acuminate with the permanent base of the style, smooth, and even, white, pulpy, and red within; seeds black. The very handsome sweet flowers appear in the months of January and February; the fruit ripens in August, and is of a sweet sub-acid flavour. Native of Jamaica, on very large trees, or in the fissures of rocks, scandent, and sub-parasitical, and is known there by the name of peach-coloured trumpet-flower.—*Swartz*. The following curious circumstance is related in Dr. Smith's Introduction to Botany: "The *solandra grandiflora*, a Jamaica shrub, was for a number of years cultivated in the English stoves, and propagated extensively by cuttings, each plant growing many feet in length every season, from abundance of moisture and nourishment, without shewing any sign of fructification. At length a pot of the *solandra* was accidentally left without water in the dry stove at Kew; and, in consequence of this unintentional neglect, the luxuriant growth of its branches was greatly checked, and a flower came forth at the extremity of each. By a similar mode of treatment the same effect has been frequently produced.

SORREL, CLIMBING—See CLIMBING SORREL.

SORREL, INDIA—See INDIAN SORREL.

SORREL ROSE—See ROSE, WILD.

SORREL, SWITCH—See SWITCH SORREL.

SORREL VINE—See VINE-SORREL.

SORREL, WOOD—See WOOD-SORREL.

SOUR GRASS—See MOUNTAIN GRASS.

SOUR AND SWEET SOPS.

ANNONA.

CL. 13, OR. 7.—*Polyandria polygynia*.

NAT. OR.—*Coadunatæ*.

GEN. CHAR.—See Alligator Apple, v. 1, page 11.

1 MURICATA. ROUGH.

Annona maxima, foliis latis splendentibus fructu maximo viridi conoide, tuberculis seu spinulis innocentibus aspero. Sloane, v. 2, p. 166, t. 225. Foliis oblongo ovatis nitidis, fructibus spinis mollibus tumentibus obsitis. Browne, p. 255.

Leaves oval-lanceolate, smooth, acute; fruits muricate; petals ovate, the interior ones obtuse, shorter.

The sour sop is a middle sized tree, rarely above twelve or fourteen feet high, or at most twenty. Trunk upright, with stiff, round, smooth, branches, and a brownish ash-coloured bark. Leaves petioled, alternate, sparse, oblong, acuminate, entire, shining, firm, stiffish; petioles short. Peduncles axillary, solitary, thick, longer than the petioles, one-flowered. Flowers coriaceous, yellow. Calyx one-leafed, triangular; corolla three-petaled, petals acuminate, thick, concave, coriaceous, smooth, scabrous on the outside, pale green. Nectary three-leaved, leaflets alternate with the petals, only

only half the size, subcordate, smooth, convex, yellow. Filaments scarcely any; anthers rather pedicelled, sub-obovate, bivalve, whitish; styles very short, crowded together into a conical form; stigmas oblique, hirsute after flowering time. Berry difform, cordate-oblong, muricate with prickles, bowed back, fleshy; seeds oblong, black, with a lateral scar of a different colour, placed in a ring. The smell and taste of the fruit, flowers, and whole plant, resemble very much those of black currants. There is a variety of it in Jamaica with inodorous leaves, larger flowers, of a fulvous colour, and spherical mucronate fruits.—*Swartz*. The pulp of this fruit, which grows to the size of a bullock's heart, is soft, white, and of a sour-sweetish taste, intermixed with oblong dark-coloured seeds. It grows very commonly even in the savannas in Jamaica. The Indian name of this tree is *suir sack*. This fruit is considered of a cooling and agreeable nature, but is the less esteemed on account of its being so common. Taken on an empty stomach it has been known to cure obstinate intermittents. A decoction of the roots is given in Guadaloupe as a cure for the poison of fish. Being reduced to powder, the root snuffed up the nose, Grainger says, produces the same effect as tobacco; and, taken by the mouth, the Indians pretend it is a specific in the epilepsy. The leaves are commonly thrown into fowl-houses for the purpose of destroying fowl-lice. Sloane says, "when they are unripe, and about the bigness of turnips, if so dressed they eat like them. Of the unripe fruit pressed is made a wine, which is as clear as water, and is good for fluxes and cankers in childrens mouths. The leaves infused, according to Piso, or burned and mixed with oil, being rubbed into an apostheme, ripens, opens, and heals it."

2. SQUAMMOSA. SCALY.

Annona foliis odoratis minoribus, fructu conoide squammosa parva dulci Sloane, v. 2, p. 168, t. 227. *Foliis oblongo-ovatis undulatis venosis, floribus tripetalis fructibus mamillatis* Browne, p. 256.

Leaves oblong, acute, smooth; fruits obtusely scaled, outer petals lanceolate, inner ones minute.

The sweet sop, or sugar-apple tree, grows only about eight feet in height, and is frequently rather a shrub; the trunk is smooth, and the branches spreading and round; leaves alternate, acuminate, entire, nerved, smooth on both sides, glaucous on the back; petioles short, round, smooth, thickened at the base. Flowers peduncled, usually in pairs, oblong, acuminate, green without, whitish within; peduncles below the petioles, longer, one-flowered. Calyx one-leafed, triangular; petals three, lanceolate, triquetrous, plane-convex without, sharp at the top, excavated within at the base, dark purple, smooth; no nectary; filaments scarcely any; anthers imbricate, placed close to the germ, obtuse, two-valved; styles short, thick, imbricate; stigmas oblong, oblique; berry oval; scales adnate, roundish, blueish, resembling sub-imbricate teats; seeds flattened a little, black, with a white scar on the side, wrapped in a succulent cottony substance.—*Swartz*. This tree is also common in the savannas and lowlands of Jamaica. The fruit when ripe becomes purplish, and hath a sweet whitish pulp, which is much esteemed by those who are fond of fruit where the sweet prevails; and, when full ripe, is said to be cooling and laxative. The leaves have an agreeable scent, when rubbed; Barham says that one of them laid on pillows or beds will draw all the bugs to it, so as you may get rid of them. Sloane observes "that the leaves beaten, putting salt to them, make a poultice, which put on malignant tumours, powerfully

fully ripens them. The unripe fruit, boiled with a little ginger, in fair water, cures the vertigo."

See ALLIGATOR-APPLE, CHERIMOYA, CUSTARD APPLE, and NUTMEG, American.

SOUTH-SEA ROSE.

NERIUM.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Contortæ*.

GEN. CHAR.—Calyx acutely five-parted, small, and permanent; corolla monopetalous and funnel shaped, a short cylindric tube having the upper part divided into five broad obtuse oblique segments, and a coronated nectarium terminating the tube: stamens very short awl-shaped filaments; anthers arrow-pointed and connivent, germen roundish and bifid; style cylindric; stigma truncated; pericarpium long, acuminate, univalvular, pods furnished with numerous oblong seeds, placed imbricated, and covered with down.

OLEANDER.

Foliis lanceolatis verticilliter ternatis, flore quandoque pleno. Browne, p. 181.

Leaves linear-lanceolate, in threes, transversely nerved underneath, calycine leaflets squarrose, nectaries flat, three-cusped.

This rises by several stalks to the height of eight or ten feet. The branches come out by threes round the principal stalks, and have a smooth bark, which in the variety with red flowers is of a purplish colour, but in the white of a light green. The leaves for the most part stand by threes round the stalks, upon very short pedicels and point upwards; they are three or four inches long and three quarters of an inch broad in the middle, of a dark green colour, very stiff and end in acute points. The flowers come out at the ends of the branches, in large loose bunches, of a bright purple, crimson, or dirty white, colour, in the varieties. In warm situations this plant ripens its fruit and makes a fine appearance; in cold wet situations the flowers often decay without opening. The leaves of the plant are acrid and poisonous. Oil, in which they are infused, is recommended in the itch and other cutaneous disorders, in preference to mercurial preparations, for children and delicate constitutions.—*Martyn's Miller*. Antidotes against the poison of this plant are vinegar and all acids. The plant is sometimes found with double flowers.

SOUTHERN-WOOD—See WORMWOOD.

SOW-THISTLE.

SONCHUS.

CL. 19, OR. 1.—*Syngenesia polygamia equalis*. NAT. OR.—*Compositæ*.

GEN. CHAR.—Common calyx imbricate, ventricose; corolla compound, imbricate, uniform; corollets hermaphrodite, numerous, equal; stamens five, capillary, very short; anthers cylindrical, tubular; the pistil has a subovate germ; a filiform style.

style, the length of the stamens, and two reflexed stigmas; there is no pericarp; calyx converging into a depressed acuminate globe; seeds solitary, oblongish; down capillary, sessile; receptacle naked.

AGROSTIS. FIELD.

Sonchus laevis, Sloane, v. 1, p. 235. *Foliis ciliatis obtusis, varie et profunde sinuatis*. Browne, p. 311.

Peduncles tomentose, many-flowered, calyxes smooth, stem striated, leaves gash serrate, sessile.

Root fusiform, fibrous, milky, whitish externally. Stem from one to three feet high, upright, branched, smooth, tender, brittle, hollow, leafy, sometimes purplish. Leaves embracing, smooth, rucinate, or pinnatifid, with the lobes acute, and more or less toothed or spiny, of a green colour above, paler below. Peduncles axillary and terminating, forming a sort of cyme, with a soft lanugo which quickly falls off. Calyx, before flowering cylindrical and truncate, afterwards bellying out at bottom and forming a cone, scales smooth and pointed. Corolla pale yellow; seed oblong, flattened, angular, grooved, somewhat rugged, notch-letted; seed down very fine and smooth; receptacle rugged with little prominent points, and shining.—*Curtis*. Although Swartz has made a different species of this from the *oleracea*, or common sow-thistle of Europe, yet the description agrees so exactly that both Sloane and Browne considered it as the same. It is very common in all parts of Jamaica, where it is generally made use of as food for hogs, of which they are very fond, as well as are rabbits. Browne says it is an excellent ingredient in all cooling, diuretic, and aperitive, apozems.

SPANISH ARBOUR VINE—See INDIAN CREEPER.

—— CALALUE—See POKEWEED.

—— ELDER—See PEPPER ELDER.

SPANISH ELM, or PRINCEWOOD.

CORDIA.

CL. 5, OR. 1.—*Pentandria monogynia*.

NAT. OR.—*Asperifolia*.

GEN. CHAR.—See Clammy Cherry, v. 1, p. 197.

GERASCANTHUS.

Nerio afinis arbor, vesiculora materie, laurifolio lucido, flore pentapetaloides sulphureo amplo. Sloane, v. 2, p. 63, t. 183, f. 2. *Foliis ovato-oblongis, utrinque productis, racemis terminalibus*. Browne, p. 170, t. 29, f. 3.

Leaves lanceolate ovate, scabrous, panicle terminating; calyxes ten striated.

Stem and branches unarmed, patulous, round, smooth; leaves petioled, scattered, acuminate, entire, veined, especially behind, smooth. Panicles large, composed of patulous, alternate, trichotomous, many-flowered, branchlets; the last pedicels three-flowered. Flowers rather large, veined, permanent, shrivelling; calyx tubular, five-toothed, ten-striated; tube of the corolla spreading towards the opening, the bottom nectarous; border five-cleft, segments blunt entire; filaments fastened to the corolla from

from the base to the middle; anthers incumbent, linear, yellow; germ oblong; style shorter than the stamens, dichotomous; stigmas blunt, yellow.—*Swartz*.

This grows to be a very large and stately tree. Its wood is of the softness and grain of elm, whence its name, having many undulated light brown or grey lines in it, making a pleasant shew, which induced the cabinet-makers to call it prince-wood. These lines are the interstices between the yearly circles of the tree. The bark is ash coloured, very smooth, having no asperities. The leaves beset the ends of the branches, smooth, and fresh green. The flowers stand several together, of a white then a sulphur colour, and are very odoriferous, continuing on the tree till the fruit falls off. When this tree is young it makes good hoops.—*Sloane*.

X This tree grows in many parts of Jamaica, and is generally esteemed as one of the best timber woods of the island; it rises to a considerable height, but seldom exceeds twenty or thirty inches in diameter, especially in the lowlands, where it is most common: it is pretty much branched towards the top, and furnished with oblong nervous leaves; the flowers are very white and grow in great numbers at the ends of the branches; but, as the germen grows larger, they fade, and turn of a dark or dirty brown colour, and continue upon the tree until the whole fruit, which seldom grows to a perfect state, falls off.—*Browne*. Long says an oil is extracted from this tree, not inferior to Rhodium, having the same scent, use, and virtues.

X We have a tree in Jamaica called Spanish elm, which hath a very sweet pleasant smell, almost like a rose. This tree is very common, and known to most inhabitants in Jamaica. The coopers make hoops of the young ones for sugar hogsheads. The heart of it is a very fine veiny wood, and would be of great use to joiners for cabinets. The oil is not inferior to rhodium, having the same use and virtues.—*Barham*, p. 57.

SPANISH NETTLE.

BIDENS.

CL. 19, OR. 1.—*Syngenesia polygamia aequalis* NAT. OR. — *Compositae*.

This generic name was given on account of the seeds terminating in two teeth, or arms.

GEN. CHAR.—Calyx imbricate, erect; corolla sometimes, but seldom, with a flos-cule or two in the ray; corollules hermaphrodite; stamens five; the pistil has an oblong germ, a simple style, and two stigmas; seeds solitary, crowned with two or more scabrous awns; receptacle chaffy. Four species of this genus are natives of Jamaica.

BIPINNATA? — DOUBLY PINNATE.

Stems and branches striated, leaves in threes; seeds diverging.

This plant grows from one to four feet high, with an upright striated stem and branches, leaves in threes on a long pedicel, side ones sub-sessile, saw-serrate, ovate acuminate, with long points, the middle leaf the largest. Branches axillary, opposite; peduncles axillary, terminal, and one-flowered, generally three together: flowers yellow; calyx sub-imbricate or double, outer ten leaflets linear, green, upright; inner ten membranaceous and coloured; the corolla has frequently no ray, but sometimes two or three barren florets; receptacle flat, chaffy; seeds linear, striated, black, two-awned, by which they stick to any thing that touches them. This plant is soft and juicy

in all its parts, and has a fibrous root, easily quitting its hold of the ground; it is called in Jamaica, Spanish nettle, and is very common, especially in the mountains, where it becomes a most troublesome weed, from the multitude of its seeds, and the quickness of its growth, as it vegetates and perfects its seed in six weeks time, when it soon after withers and dies away. The fields on which it is allowed to seed a few days after a shower of rain appear covered with a green and beautiful verdure, like a bed of parsley. Cattle and horses are very fond of this plant. The decoction of the leaves, about a handful in a common teapot, drank frequently is said to be good for a strangury or stoppage of urine. Boiled and eaten as a green, they are said to be good for the flux. The expressed juice, about a tea spoonful, with two or three grains of salt, dropped into the eyes, removes dimness and films.

2. SCANDENS. SCANDENT.

Suffructicosus, vimineus; foliis oblongo-ovatis, oppositis; floribus cymosis. Browne, p. 517.

Leaves opposite, ovate-acuminate, serrate; stem climbing, shrubby; flowers panicled, ovate.

Stem round and somewhat rugged; branches long, round, divaricate; leaves petioled, somewhat angular at the base, nerved, wrinkled, dark green, smooth on both sides; nerves beneath subvillose. Peduncles terminating, opposite, decussated; flowers peduncled, white, ovate, or conical. Calyx conical, with ovate, acute, minute, scales; border of the corollets recurved; anthers black; pollen fulvous; seeds wedge-shaped, oblong, crowned with two awns; chaffs of the receptacle arched at the tip, including the florets, keeled at the back. Native of Jamaica in the cooler mountains.—Suartz. Browne calls it the weakly shrubby *bidens*, rising five or six feet, or more, but requiring the support of the neighbouring bushes.

3. HIRSUTA. HAIRY.

Conyza fruticosa, folio hastato; flore pallide purpureo. Sloane, v. 1, p. 257.

Leaves opposite, ovate-lanceolate, entire, tomentose, hirsute, stem climbing shrubby; peduncles opposite, diverging, many-flowered.

This by a large woody stem, rises seven feet high, bark whitish, branches quadrangular and opposite. Leaves at the ends of the twigs, an inch and a half long and an inch broad at the base, hairy; and odoriferous. Peduncles axillary, leafy, supporting the flowers, each on its own peduncle, of a pale purple colour, standing close together; seeds small, oblong, striated, of a light brown colour, with several awns. Sloane says this herb is accounted an admirable vulnerary, being beaten and applied to the wound.

4. NIVEA. SNOWY.

Leaves simple, cordate-ovate, acuminate; branches trichotomous, serrate; hemispherical, peduncles elongated.

Stem two feet high, branched very much, bluntly four-cornered, upright, somewhat rugged; branches opposite, decussated, patulous, four-cornered, rugged; leaves opposite, nerved, wrinkled, and rugged, on longish petioles. Terminating branches trichotomous, elongated; the final peduncles longer, with solitary, hemispherical, white flowers; florets numerous; scales of the calyx ovate, convex, pubescent, shorter than the chaffs of the florets, which are very many; anthers bluish; seeds oblong, acuminate

acuminate at the base, truncate at the top, four-cornered, crowned with three very short bristles; chaffs on the receptacle oblong, flat, sharp, membranaceous, longer than the calyx, after flowering rigid, patulous. Native of Jamaica, in elevated pastures, and on the sea coast of the southern parts. Swartz.

SPANISH PLUM.

CL. 10, OR. 4.—*Decandria Pentagynia*.

GEN. CHAR.—Calyx a one-leafed perianth, sub-campanulate, small, five-cleft, coloured, deciduous; corolla five oblong, flat, spreading, petals; stamens ten awl-shaped filaments, erect, shorter than the corolla, alternately longer; anthers oblong; the pistil has an ovate germ, five short, distant, erect, styles, and obtuse stigmas; the pericarp is an oblong drupe, large, marked with five dots, from the falling of the styles, ten-valved; seed an ovate woody nut, fibrous, five-cornered, five-celled, covered with a fleshy elastic aril. Two species are natives of Jamaica.

SPONDIAS.

NAT. OR.—*Terebintaceæ*.

1. MOMBIN.

Myrobalanus minor, folio fraxini alato, fructu purpureo, ossiculo magno fibroso. Sloane, v. 2, p. 126, t. 219, f. 3. 4. 5. *Diffusa, foliis plurimis minoribus pinnatis, penna compressa sulcata, floribus præcocibus.* Browne, p. 228.

Leaves with the common petiole compressed.

This is an ugly tree, sometimes thirty feet high, but varying much in height; the bark is thick, and the wood whitish and brittle; trunk upright; branches thick and irregular. Leaves pinnate, alternate, at the ends of the branches, falling off, especially when the fruit is ripening; leaflets sub-ovate, entire, veined, on very short petioles, varying in size, about ten on each side, with an odd one. Racemes short, placed without order, often pretty closely, on the branches; but instead of these there are sometimes peduncles with one, two, or more, flowers; these are small and red; the segments of the calyx blunt, roundish, concave; the petals blunt, and concave at the end; stigmas simple. Rind of the fruit purple, yellow, or variegated with both; pulp sweet, slightly acidulated, yellow, thin, having a singular, but not unpleasant, taste, and a sweet smell. It varies in form, being oblong, sub-ovate, very blunt at the end, or with a large appendix there. The seed scarcely ever ripens, but it is so easily increased by cuttings, that if a branch laden with young fruit be set in the ground it will grow, and the fruit will soon come to maturity. Hence, in St. Domingo, they make hedges of the boughs, which flower and bear fruit in a few months. If the tree be headed, it pushes out very long upright branches, with numerous leaves scattered the whole length, and puts on an appearance so different as hardly to be known for the same tree. *Jacquin*. The Spanish plum-tree is small and spreading, its foliage of a dark gloomy green colour, and generally begins to shoot as the blossoms fall. There is a variation of this plum, called the leather-coat, from the appearance of its skin; but this proceeds from the dry soil in which it is produced. This, as well as the hog-plum, and Jamaica plum, the silk-cotton-tree, and some other American plants, vegetate so easily, that a limb or branch stuck into the ground seldom fails to shoot up anew, and generally appears in a few weeks supplied with roots and leaves like the parent

rent stalk. It is remarkable that in this, and many other American bacciferous plants, where the cup stands under the germen, the embryo is always surrounded by a fleshy navel, which swells as that increases, and forms the pulp gradually about it. *Browne*.

This is sometimes called purple hog-plum-tree.

2. MYROBALANUS.

Myrobalanus, folio fraxini alato fructu luteo, ossiculo magno fibroso.
Sloane, v. 2, p. 125, t. 219, f. 1, 2. *Foliis plurimis pinnatis ovatis, racemis terminalibus, cortice interne rubenti.* *Browne*, p. 229.

Petioles round, leaflets shining acuminate.

This is a tall tree, with a wide branching head; bark ash-coloured and full of clefts; wood whitish, smooth, not durable, fit only for fuel and making stoppers. Leaves pinnate, alternate, sub-frondose, with a round rib, a foot long; leaflets for the most part eight, with an odd one, ovate-oblong, ending in a blunt point, smooth, quite entire, petioled, the middle ones about three inches long, the others shorter. Racemes loosely paniced, somewhat yellow, length of the leaves, terminating; flowers very numerous, small, whitish, and sessile. Calyx five-toothed, acuminate; petals sub-lanceolate, acute, spreading very much; anthers erect; stigmas compressed and bilamellate. Very few fruits succeed this abundance of flowers in each raceme. They are yellow with sometimes a slight mixture of redness, sweet smelling, covered with a thin skin, the size of a pigeon's egg, having within a little succulent acidulous pulp, and a very large nut; eaten by some, and making an excellent food for hogs. As the branches or cuttings grow so readily, it is used by some for hedges, and they are frequently planted in pastures to afford shade. *Jacquin*. *Browne* observes, that the filaments stand upright, and grow in an even circular order round the germ; the styles are always four, compressed and enlarged at the top. This is called the Jamaica or hog plum-tree, which blossoms in March and the fruit is ripe in August.

X This is called the hog-plum-tree, and is a larger tree than any of the rest, having a large yellow plum, which hath a rankish smell, but a pleasant tart taste. The hogs feeding upon them, they are called hog-plums; sheep also feed upon them when fallen to the ground. In the year 1716, after a severe fever had left me, a violent inflammation, pain, and swelling, seized both my legs, with pitting like the dropsy. I used several things, to no effect. A negro going through the house when I was bathing them, said, "Master, I can cure you," which I desired he would; and immediately he brought me bark of this tree, with some of the leaves, and bid me bathe with that. I then made a bath of them, which made the water as red as claret, and very rough in taste: I kept my legs immersed in the bath as long as I could, covering them with a blanket, and then laid myself upon a couch, and had them rubbed very well with warm napkins; I then covered them warm, and sweated very much; I soon found ease, and fell asleep. In five or six times repeating this method, I was perfectly recovered, and had the full strength and use of my legs. *Barham*, p. 148.

The bark of this tree has also been recommended as a cure for glandered horses and mules, in the following manner:—When the disorder is perceived, bleed plentifully twice, giving the following mixture every third morning, and confining the beasts in a close pasture: pound two heads of garlic, cleaned from the trash, add flour of brimstone, mustard, and antimony, of each as much as can be taken up on the point of a full sized table knife, and three large spoonfulls of sweet oil; mix these ingredients with so much decoction of hog-plum bark and ground ivy as will fill two large drenching

ing horns. Fumigate them for a few minutes every morning with the nests of wood ants and tar.

A reddish or dark brown mucilaginous gum exudes from this tree, when wounded. The tops boiled in water is good to shave the beard, and for washing, having a good scent. The bark in decoction is astringent. From a piece of the root cut issues water, like the water-withe. *Sloane*.

There is a variety of this tree, with smaller leaves, also very common in Jamaica, which both *Sloane* and *Browne* have noticed; but it is difficult to distinguish the one from the other, being so similar in habit, in flower, and in fruit. *Sloane* says the wood was used for cork.

SPIDER-WORT.

TRADESCANTIA.

CL. 6, OR. 1.—*Hexandria monogynia*.

NAT. OR.—*Ensatae*.

This was so named from John Tradescant, who first introduced it into Europe.

GEN. CHAR.—Calyx three-leaved, corolla three-petaled, stamens six equal filaments with jointed hairs, anthers kidney-form, the pistil has an ovate germ, a filiform style, and a three-cornered stigma; the pericarp is an ovate three-celled capsule, seeds few and angular. Four species are indigenous to Jamaica, and the whole genus nearly allied to *commelina*.

1. ZANONIA.

Periclymeum rectum herbaceum, gentianæ folio, folii pediculo caulem ambiente. *Sloane*, v. 1, p. 243, t. 147, f. 1. *Erecta major simplex, floribus conglomeratis pedunculo longiori incidentibus.* Br. p. 125.

Erect, leaves broad-lanceolate, peduncles lateral solitary, jointed in the middle, many-flowered, bractes in pairs.

Plant herbaceous, two feet high; stem simple, jointed, round, sheathed, almost naked below, smooth, succulent; leaves sub-sessile, attenuated at the base, sheathing, alternate, acuminate, entire, nerved longitudinally, smooth above, pubescent or villose beneath, almost a foot long; sheaths ovate, half an inch long, distant from the stem, membranaceous, nerved, shrivelling, at the edge hirsute, ciliate. Peduncles opposite to a leaf, round, elongated, length of the leaves, surrounded at the base with a sheath, which is cowed, membranaceous, retuse; they are jointed in the middle, and at the joint there is an acuminate sheath. Flowers terminating, from six to eight, white, on very short pedicels, which are clustered, thickened, and unequal; they gradually erect themselves as they flower, and are again turned back as the flowers go off. Under each pedicel is a two-leaved involucre, or two bractes, which are opposite, ovate, acuminate, entire, nerved, reflexed, smooth. Calyx somewhat pitcher-shaped, trifid at the base; leaflets ovate, acute, concave, inclosing the corolla. Petals a little bigger than the calyx leaves, ovate-acute, erect, waved at the edge, white or hyaline; filaments the length of the petals, villose in the middle, equal; anthers double, three-cornered, uniform; germs oblong, placed on the middle of the calyx; capsule berried, oblong, three-cornered, when ripe very dark purple, placed obliquely on the pedicel. Native of the southern parts of Jamaica, in mountain woods, flowering in the spring months. *Swartz*.

A a 2

2 MULTIFLORA,

2. MULTIFLORA. MANY-FLOWERED.

Erect, branched; leaves cordate, ciliate on the edge and sheaths; peduncles clustered, axillary; flowers three-stamened.

From one to two feet high; stem herbaceous, somewhat pointed, round, striated, smooth; branches from the sheaths of the leaves shortish, erect, leaves alternate, sessile, sheathing at the base, cordate ovate acute, an inch long, somewhat striated with longitudinal nerves, smooth on both sides, somewhat ciliate on the edge; sheaths short, sub-cylindric or ovate, somewhat ventricose, membranaceous, striated, ciliate at the edge. Peduncles from the sheaths of the terminating leaves, two or three together, commonly shorter than the leaves, erect, many-flowered, rough-haired. Flowers ten to twelve in little umbels, pedicelled, small: pedicels unequal, shorter than the peduncles. There are a few little ciliate bractes at the base of the pedicels; calyx-leaves acute, brownish-green, pubescent; petals less than the calyx, or equal to it, ovate, white, caducous, filaments three, shorter than the petals; anthers cordate; germ roundish-three cornered; style thick, very short; stigmas three, white-villose; capsule roundish, acuminate, placed on the permanent calyx; seeds solitary, roundish, flattened a little, umbilicate, hollowed, black. Native of Jamaica in mountain woods.—Swartz.

3. CORDIFOLIA. HEART-LEAVED.

Creeping, filiform, leaves cordate; peduncles terminating, solitary, many-flowered.

This is a small herbaceous annual plant; radicles numerous, whitish: stem tender, sheathed, jointed at the base, round, succulent: the branchlets short, coming out below the sheaths of the leaves, depressed, ascending, rooting. Leaves subsessile, sheathing at the base, alternate, small, cordate-ovate, with a very short point, entire, nerveless, netted-veined, bright green, sub-diaphanous; sheaths short, surrounding the stem, ciliate at the jaws. Peduncles longer than the leaves, erect, flowering at the top; flowers three to five minute, on short pedicels, clustered in umbellats, with two or three very minute ovate bractes, ciliate at the edge, under their base; pedicels bent down after flowering: calyx leaves pubescent, green except the base, which is brown: petals bigger than the calyx leaves, cordate-ovate, acute, white, caducous; nectaries none; filaments very short, uniform, naked at the base, not hairy; anthers twin pellucid, with roundish cells; germ roundish-three-cornered, pellucid; style thickish; stigma subcapitate, trifid, pubescent; capsule three-cornered, opening at the top; cells two-seeded; seeds roundish. Native of Jamaica, in moist shady grassy parts of high mountains; flowering in autumn.—Swartz.

4. DISCOLOR. TWO-COLOURED.

Stemless, even, bractes equitant compressed, leaves lanceolate, coloured underneath.

Root perennial, vertical, fleshy, knotty; leaves radical, numerous, embracing each other, spreading, a foot long, sharpish, entire, fleshy, slightly ribbed, smooth on both sides, a little downy at the edge of the base, green above, bright purple on the margins and under side, the younger ones somewhat channelled; stipules none; stalks axillary, four times shorter than the leaves, solitary, erect, simple, rarely divided, a little compressed, smooth, whitish; external bractes sheath-like, slightly ribbed, purple.

plish, smooth, polished in the inside; of which the lowest are the smallest, thinnest, embracing the stalk, and alternate; the uppermost scarcely ever more than two, very large, formed like a boat, somewhat heart-shaped at the base, embracing each other, ending in a point; internal bractes scaly, membranous, white, and pellucid, three times shorter than the outer ones. Flowers numerous, between the uppermost and external bractes, which they scarcely rise above, separated and enfolded in distinct clusters by the internal ones, pedicelled, white, short-lived, and scentless. Pedicels simple, single-flowered, roundish, a little swelled in the upper part, whitish, sometimes green at the top, smooth, polished, curved after flowering. Calyx corolla-like, whitish, pellucid, smooth; leaflets equal obtuse; petals a little longer than the calyx, and alternate with its leaflets, broad-oval, obtuse, waved at the margin, when faded rolled inward; filaments as long as the corolla, nearly equal, almost erect, white, clothed a little above the base with numerous very slender, white, pellucid, hairs, which are most beautifully jointed, like a conferva, and are somewhat shorter than the stamen, standing nearly erect; anthers wedge-shaped, vertical, yellow, smooth, entire at the top, bearing pollen at their orange-coloured edges; germ superior, roundish, triangular, smooth, white; style erect, cylindrical, white, and smooth; stigma small, obtuse, rough; capsule scarcely so large as a pea, smooth, turning red; seeds solitary, somewhat kidney-shaped. This plant is noticed in the Hortus Eastensis by Mr. Wiles, who says he found it at the road side near Stoney-Hill. It was also found in Jamaica by Mr. Mathew Wallen, who sent the seeds to Europe. It is the species *spathacea* of Swartz.

There is in America a plant, that grows very plentifully in watery places, like to the English *phalangium*, or spider-wort. These spider-worts are all of the same virtues, and receive their name from having a peculiar quality to expel the bite or venom of spiders, which, it is said, they cure infallibly. Some of them grow like water-plantain; some have a leaf like gentian; some are branching and spreading, others not; some have deep-purple or bluish flowers, some have white flowers, another a reddish or carnation colour; but most of them soon fade away and spring again, and therefore have the name of *ephemeræ*.—Barham, p. 177.

SPIKENARD.

BALLOTA.

CL. 14, OR. 1.—*Didynamia gymnospermia*. NAT. OR.—*Verticillatæ*.

GEN. CHAR.—Calyx a one-leafed perianth, salvershaped, five-toothed, ten sheathed; corolla monopetalous, ringent, upper lip crenate, concave; lower trifid; stamens four filaments, two shorter; anthers oblong; the pistil has a quadrifid germ, a filiform style, and slender bifid stigma; no pericarp, calyx unchanged, seeds ovate. One species is a native of Jamaica.

SUAVEOLENS. SWEET-SMELLING.

Mentastrium maximum, flore cæruleo, nardi odore.—Sloane, v. 1, p. 171, t. 102, f. 2. *Hirsutum foliis cordatis serrato subsinuatis, floribus verticilliter spicatis*.—Browne, p. 257, t. 18, f. 3.

Leaves cordate, spikes leafy, calyxes truncate, awns linear.

Stem

Stem upright, becoming shrubby at bottom, branched, hirsute; branches somewhat erect, villose; leaves opposite, roundish, sometimes elliptic, crenate, nerved, villose; petioles long, slender, lax. Peduncles axillary towards the ends of the branches, three or five flowered; flowers approximating, blue; calyx ten-sheathed, villose, viscid, teeth awned, upright, villose; tube of the corolla narrower at the base, from the middle to the opening spreading out; upper lip composed of the two upper, erect, lateral segments and the helmet, which is smaller than the segments, ovate, arched, bent down, keeled above; lower lip composed of the two lower segments, which are also bent down; filaments from the bottom of the tube, standing up above the opening of the corolla, pubescent; anthers blackish; germ ovate; style shorter than the stamens; stigma simple, blunt; seeds two, naked, ovate, black, slightly compressed. There are seldom four seeds. It is an annual plant, and the whole of it has a very strong smell.—*Swartz*. The Portuguese call it *erva cidreira*, from its smelling somewhat like citron. It grows wild in many parts of Jamaica, especially in the low gravelly land about Kingston and Old-Harbour, where it commonly rises two or three feet. It is one of the most grateful cephalics and alexipharmics of this class of plants, and may be used with great propriety in most disorders of the nerves and viscera, where such warm medicines are required.—*Browne*.

In America grows, in great plenty, a most excellent spikenard. Its leaf is in shape of the balm, but much bigger, and more like the wild horse-mint, with a large square rough stalk, and globulous head full of small blue flowers. It hath a very strong scent, like spikenard; and if you squeeze the tops in your hand, a clammy or oily substance will stick to it, and give it a strong scent like the best oil of spike. It is an annual plant, and in its greatest perfection about Christmas; in a little time after, none of it is to be seen. It is one of the greatest provokers of urine and stone-breakers that ever I experienced: I was once sent for to a person that lay in a strange condition, like hysteric fits, who, upon nice inquiry, I found was much troubled with the stone and gravel, and, near upon the time of voiding them, used to be so until she voided a stone or gravel, and then came out of these fits; upon which, I ordered a strong beverage or sherbet, with lemons, sugar, and a little spirit of vitriol, and then added an oily spirit made from this plant, and gave it to her to drink of plentifully like punch, telling them, that if it fuddled her it was no matter, it would do her no harm, for she had no fever. She followed my directions, drank plentifully of it, and fell into a sound sleep; and as soon as she awaked, made a great quantity of urine, with small stones and gravel; in a few days, there were brought away as many small stones as could be held in the hollow part of one's hand; and she was free from those fits, nor ever complained of any gravel or stone, as long as she lived after, which was many years. I have often relieved persons that have had a total stoppage of urine, and have been in such agonies and pain that great sweats and fainting fits have attended them, and death expected every minute, by their only drinking of the aforesaid composition, which made them evacuate with great violence and in great quantities, bringing away gravel or slime along with their urine, which would smell very strong of the oily spirit. It also expels poison, and drives out all malignancies. Planters give it decocted to the negroes, to drive out the small-pox, and to comfort the heart, as they call it. The dried herb, given in powder, expels wind, cures the cholic, and opens obstructions. The whole plant makes an excellent bath, to take away aches or pains; and heals ulcers.

We have another sort, that is very odoriferous, that grows with a long spiked head; I have seen grow to six or seven feet high; but it is not so oily as the other sort.—*Barham*, p. 177.

No English Name

SPILANTHUS

CL. 19, OR. 1.—*Syngenesia polygamia æqualis*.NAT. OR.—*Compositæ*.

GEN. CHAR.—Common calyx sub-hemispherical, imbricate; scales lanceolate-linear, compact, in a double row; corolla compound, uniform, tubular, conico convex; hermaphrodite corollets numerous, equal; proper one-petaled, funnel-shaped, border four or five cleft, reflexed; stamens four or five capillary filaments, short; anthers cylindric, tubular; the pistil has an oblong compressed germ, a filiform style the length of the stamens, stigmas two, recurved; no pericarp, the calyx is unchanged; seeds solitary, oblong, compressed-flat, membranaceous margined, two-awned at the tip, one awn often smaller than the other; receptacle chaffy conical; chaffs compressed, deciduous. One species has been found in Jamaica.

ULIGINOSUS.

BOGGY.

Leaves ovate-lanceolate, crenate; stem erect, dichotomous; peduncles terminating, flowers radiate. *Swartz*.

SPIRIT-LEAF, OR SNAP-DRAGON.

RUELLIA.

CL. 14, OR. 2.—*Didynamia angiospermia*.NAT. OR.—*Personatæ*.

GEN. CHAR.—See Christmas Pride, vol. i. p. 189.

TUBEROSA.

TUBEROUS.

Gentianella flore cæruleo, integro vasculo seminali ex humidi contactu impatiente. Sloane, v. 1. p. 149, t. 95, f. 1. *Erecta, asphodeli radice, pedunculis tri-partitis alaribus.* Browne, p. 268.

Leaves ovate cunate, peduncles one-flowered.

Tubus of the root oblong, smooth; stem herbaceous, undivided, upright, from six inches to a foot in height, four-cornered, smooth, but pubescent at top; leaves wedge-shaped at the base, ovate, nerved, smooth. Peduncles axillary, opposite, spreading, seldom simple, commonly three-parted, the length of the leaves, sometimes trichotomous; flowers large, blue; capsule oblong, acuminate; seeds roundish, black.—*Sw.*

X Menou weed, spirit weed, or snap-dragon, is very common in most parts of Jamaica, and is remarkable for its oblong fleshy roots, which are frequently used among the negroes. These, when fresh, have a little pungency, which soon wastes upon the palate; but, when dry, they are quite insipid.—*Browne*. This plant is well known in Jamaica by this name. It hath several brown and straight roots, of an inch and an half or two inches long; from these roots arises a four-square stalk, about nine or twelve inches high, jointed, where come out the leaves, of a dark-bluish colour; at the top comes out the flower, monopetalous and bell-fashioned, of a delicate blue colour; after which succeeds a four-square seed-vessel, about an inch long, containing a great many small brown flat seeds; which seed-vessel, touched with the least moisture, springs open with a little snap or noise: And therefore I have advised a person to put one of the seeds in his mouth, and immediately it would fly open, with a leap up to the roof of his mouth, which would surprise those who were not acquainted with it. By this springing motion, it scatters its seeds as if sown by art, and often infests or over-runs great . . .

great quantities of ground, not to be got out without much pains and difficulty. The whole plant much resembles the *gentianella alpina verna major et minor* of Parkinson. It is an admirable vulnerary herb; the planters make an excellent balsam of it to cleanse and heal all ulcers. It is also called *felwort*.—*Barham*. It grows under the shrubs in the savannas about the town, and is in perfection some time after a rainy season. The admirable contrivance of nature in this plant, to propagate itself, is most plain; for, the seed-vessels being the best preserver of the seed, it is there kept from the injuries of the air and earth, till it be rainy, when it is a proper time for it to grow, and then it is thrown round the earth as grain by a skilful sower. This is a very good wound herb, a very excellent salve being made with it and suet boiled together, and then strained. It is used likewise applied on issues to make them run.—*Sloane*.

See CHRISTMAS PRIDE.

SPLEENWORT.

CL. 24, OR. 1.—*Cryptogamia filices*.

ASPLENIUM.

NAT. OR.—*Ferns*.

So named, as it was supposed to dry up the spleen.

GEN. CHAR —Fructifications dispersed in right lines along the under disk of the frond. Seventeen species have been found in Jamaica.

1. RHIZOPLYLLUM. ROOT-LEAVED.

Fronds crenate-uniform undivided, top filiform rooting.

Root fibrous; fronds triangular, acuminate, point long, linear; at the base hollowed, eared; on long petioles. Fructifications irregularly dispersed over the whole disk of the leaves in oblong spots. The ends of the fronds bend down to the ground, and there throw out roots, by which it propagates itself.—*Martyn*.

2. SERRATUM. SERRATE.

Phyllitis non sinuata foliorum limbis leviter serratis. *Sloane*, v. 1. p.

72. *Acaule foliis amplissimis, margine inequali et leniter serrato, petiolis angulatis et marginatis*. *Browne*, p. 92, A. 1.

Fronds simple, lanceolate serrate, subsessile.

The root consists of brown fibres, sending up eight or nine fronds, three inches long, three fourths of an inch broad, where broadest, yellowish green, narrow at the beginning, increasing to near the end, and then decreasing to a blunt point. Native of woods in the inland parts of Jamaica.—*Sloane*. *Browne* calls it the large simple asplenium or harts tongue, with a serrated margin, found in all parts of Jamaica, and generally observed to grow in tufts. The leaves rise from a thick fibrous root two or three feet, growing sometimes on trees, sometimes on the ground.

3. PLANTAGINEUM. PLANTAIN-LEAVED.

Acaule minus, foliis oblongis, petiolis glabris. *Browne*, p. 92, A. 2.

Fronds simple, ovate-lanceolate, subcrenate, stipe four-cornered.

The simple asplenium, or hart's tongue, with a smooth shining footstalk, seldom rises above ten or twelve inches, but grows from a fibrous root, which generally runs into the

the ground, whereas the foregoing sometimes grows upon trees; the margin of the fronds is even and the stipe smooth. It is found on the road to May-Day Hill.

4. NODOSUM. KNOTTY.

Filix major in pinnas tantum divisa, raras, latiores, oblongas, striatas, ex adverso sitas, et non crenatas. Sloane, v. 1, p. 85, t. 41, f. 1. *Simplex assurgens, foliis oblongis oppositis, caule geniculate, lineis fructificationis fere contiguas.* Browne, p. 93, A. 7.

Fronds pinnate; pinnas opposite lanceolate, quite entire.

Root black, knobbed, tuberous, height two or three feet, upright, smooth; pinnas long, striated; fructifications in long straight parallel lines, from the edge of the frond to the rachis. Browne says it was very common about the barrack road in the mountains of Westmorland, and has the seed lines so closely disposed that it may easily be mistaken for an acrostichum, at first view. Sloane found it on Mount Diablo.

5. SALICIFOLIUM. WILLOW-LEAVED.

Lonchitis major, pinnis latioribus, leviter denticulatis, superiore latere auriculatis. Sloane, v. 1. p. 78.

Fronds pinnate; pinnas sickle-lanceolate, crenate from the base, upwards angular.

Height a foot and a half; stipe blackish, pinnas alternate, a third of an inch distant from one another, on very short footstalks; the middle pinnas are largest, being an inch and a quarter long, and about half an inch broad at the base; they end in a point, are serrate at the edges, and are eared at the uppermost edge of each pinna. It grows in inland woody parts of the island.—Sloane.

6. DENTATUM. TOOTH-LEAVED.

Minus assurgens simplex, foliis oblongis, margine inequali crenato. Browne, p. 93, A. 5.

Fronds pinnate; pinnas wedge-shaped obtuse, crenate emarginate.

The simple erect asplenium with crenate leaves grows in great abundance about the mountains in Liguanee, from six to eighteen inches in height. Swartz observes that the *A. pygmæum* of Linneus is nothing but a young plant of this species.

7. RHIZOPHORUM. ROOTING.

Lonchitis asplenii facie pinnulis variis. Sloane, v. 1. p. 76. *Simplex minus refletens, foliis oblongis crenatis et subauritis, summitate aphyllis radicanti.* Browne, p. 92, A. 4.

Fronds pinnate, rooting at top; pinnas ovate repand, somewhat eared; very small ones remote, quite entire.

This plant is frequent in the mountains of Liguanee, seldom rising above ten or twelve inches, and always found with the top bending towards the ground.—Browne. The young plant is simply pinnate; but when farther advanced it is bipinnate.—Swartz. The face of this plant, and difference of the leaves, make it difficult to assign it a right place; for almost every stipe has several different kinds of pinnae. The leaves are sometimes oblong auriculated, and disjoined, at other times they are auriculated, disjoined, towards the top weak, trailing, and touching the ground, take root. Another variety is the leaves, which are serrated or as it were made up of pinnules, making it seem a different plant.

8. MARGINATUM. MARGINED.

Simpliciter pinnatum, caule compresso marginato, fronde pinnata, laciniis sub-lobato-dentatis inferioribus distinctis, superioribus adnatis.

Browne, p. 94, A. 15.

Fronde pinnate; pinnae opposite, cordate, lanceolate, sub-marginate quite entire.

The divided asplenium with margined ribs seldom rises above two feet. It is beautifully divided and margined, and seems to thrive best in a shady dry place. It is frequent in the lower mountains of Liguanea.

9. EROSUM. LACERATED.

Lonchitis major pinnis angustioribus leviter denticulatis superiore latere auriculatis. Sloane v. 1. p. 78, t. 33, f. 2. *Simplex, nigrum, foliis oblongo-acuminatis, margine quasi laceratis.* Browne p. 94, A. 11.

Fronde pinnate; pinnae trapeze-oblong, striated, erose, eared at the base.

Root with long capillary fibres, black, scaly, and covered with ferruginous moss; stem black and simple, rising from fourteen to eighteen inches; leaves pointed and appearing as if torn on their edges. It grows in the lower mountains of Liguanea, and thrives best in a sandy soil.—Browne.

10. PROLIFERUM.

Phyllitis non sinuata minor apice folii radices agente. Sloane v. 1, p. 71, t. 26, f. 1.

Fronde sessile, broad-lanceolate, the first leaves ob-ovate, rooting at the end.

Root small, scaly, black, with many long dark brown fibres; leaves many, of different sizes, the largest two inches and a half long, and about half an inch broad near the middle; they end in a point which bows down to the ground, takes root, and sends out rounder leaves, in time growing longer, and with their ends taking root. The seed lies in round spots on each side of the middle rib underneath. It grew in a rich, thick, very high, and shady wood, at the bottom of Mount-Diablo.—Sloane.

11. PUMILUM. DWARF.

Fronde ternate, leaflets three-parted, gashed.

Fronde several, upright, about four inches high, stipes round, slender, black and shining at the bottom, but among the leaflets green, with small bristles scattered over it. Leaflets elongate-triangular, acute, sub-petioled, divided into rounded blunt lobes; the lowest and end leaflets are longer than the rest, and eared on each side at the base; on the nerves are very small bristles, scarcely visible with the naked eye. Fructifications on the whole back of the frond, oblong, ascending, rufous, from two to four lines in length.—Jacquin,

12. DIMIDIATUM. HALVED.

Fronde pinnate, pinnae trapeze-oblong acuminate, angular upwards, entire and flat downwards.—Swartz.

13. FRAGRANS. FRAGRANT.

Fronde subtripinnate, leaflets alternate, pinnae lanceolate, broadish, serrate at the tip.—Sw.

14. GRANDIFOLIUM.

14. GRANDIFOLIUM. GREAT-LEAVED.

Fronde pinnate; pinnae alternate, lanceolate, sub-serrate at the base, rectangular above, rounded below.—Sw.

15. DISSECTUM. DISSECTED.

Fronde pinnate; pinnae lanceolate, gash-serrate, tailed at the tip.—Sw.

16. PREMORSUM. BITTEN.

Fronde tripinnatifid, pinnae somewhat wedge-shaped, pinnules crose-toothed at the tip.—Sw.

17. CICUTARIUM. HEMLOCK-LIKE.

Ruta muraria accedens filicula non ramosa minima, pinnulis subrotundis profunde scissis. Sloane, v. 1, p. 92, t. 52, f. 3.

Fronde tripinnate, very smooth, the upper ones pinnatifid, leaflets lanceolate entire.

This has a solid black root, covered with a black hairy moss towards its top, whence rise out nine or ten leaves about three inches high. Stipes dark green, at an inch from the ground dividing into several alternate twigs, those in the middle being largest, about three-quarters of an inch long, made up of alternate, small, roundish, pinnules deeply cut in at the edge, of a pale green colour above, and underneath having very many ferruginous spots. It grew on rocks, on the banks of the Rio D'Oro in Sixteen-Mile Walk.—Sloane. These are of the fern kind. They are accounted specifics for all distempers of the spleen, wherefore they have the name of spleen-wort; they open obstructions, and therefore good against the yellow jaundice; they take away hiccoughs and strangury, expel gravel, and help a violent gonorrhœa. Barham, p. 180.

See FERNS.

SPLEEN-WORT, ROUGH.

LONCHITIS.

CL. 24, OR 2.—*Cryptogamia filices*

NAT. OR.—*Filices.*

This generic name is derived from the Greek word for a spear.

GEN. CHAR.—Capsules disposed in lanceolated lines lying under the sinuses of the frond. Two species are natives of Jamaica.

1. HIRSUTA. HAIRY.

Hirsuta costa simpliciter pennata, lobis oblongis obtuse crenatis.
Browne, p. 89, L. 3.

Fronde pinnatifid, blunt, quite entire, shoots branched hirsute.

This plant rises commonly to the height of four or five feet; it is moderately hirsute, and often found in the mountains of St. Anns.

2. PEDATA. FOOTED.

Erecta tribrachiata, lateralibus tripartitis. mediocrecto, simplici.
Browne, p. 89, L. 2, t. 1, f. 1, 2.

B h 2

Fronde

Fronds pedate, pinnae pinnatifid serrulate.

This rises by a simple stalk to the height of two or three feet, and then divides into three parts, whereof the middle is simple; but each of the lateral divisions is again parted into three simple branches of a proportionate length. It grows in the mountains of New-Liguanea. *Browne.*

See FERNS.

SPURGES.

EUPHORBIA.

CL. 11. OR. 3.—*Dodecandria trigynia.*

NAT. OR.—*Tricoccæ.*

GEN. CHAR. — See Eyebright, v. 1, p. 286. The following species are also natives of Jamaica:

1. GLABRATA.

SMOOTH.

Peplis fruticosa, maritima, geniculata Sloane, v. 1, p. 198.

Unarmed, shrubby, branched; leaves opposite, ovate, acute, smooth, quite entire.

The whole of this plant is smooth; stem erect, unarmed, jointed, purplish; branches dichotomous, covered with leaves at the bottom; leaves sessile, the length of the joints, sharpish, the lower ones erect, the upper ones spreading; stipules roundish, minute, pale, ciliate. Flowers at the ends of the branchlets, axillary, and at the divisions, solitary, small, peduncled; peduncles shorter than the leaf; calyx smooth, the throat whitish with close villose hairs; petals five roundish; capsule nearly the size of a coriander seed, smooth, and quite even. Sloane calls it the small leaved sea-spurge, with whitish yellow flowers, a milky plant, which grew on the Gun Cayos at Port-Royal.

2. TITHYMALOIDES.

TITHYMALUS-LIKE.

Shrubby, leaves in a double row, alternate, ovate.

This is a wand-like sub-erect plant, six feet high, the whole of it abounding in a white, bitterish, milky, juice. Stems numerous, round, smooth, weak, very pliant, branched, the thickness of the finger, the older ones ash-coloured, the younger ones green; leaves, some obtuse, others acute, coriaceous, quite entire, petioled, deep green, two or three inches long, deciduous, except on the branches, the middle dorsal nerve and the petiole augmented by a longitudinal lamella more or less waved and conspicuous, at first frequently tomentose on both sides, but with the upper surface very even, and the edges extremely waved; afterwards both sides always become flat and smooth. Peduncles one-flowered, short, aggregate about the extremities of the branchlets, coming out principally when the plant is without leaves; flowers void of scent, of a beautiful scarlet colour, and, on account of their singular structure, perhaps claiming a right to be of a distinct genus, though this species has most characters the same as other euphorbiums. Calyx two-leaved, two-valved, falling off as the flower opens; the leaflets ovate, concave, acuminate, of the same colour with the corolla, which is one-petaled, irregular, four-parted, the upper segment sub-triangular, emarginate, obtuse, incumbent; the two lateral ones oblong, obtuse, produced forwards.

wards, converging, double the length of the upper one; the fourth very small, oblong, obtuse, placed between the lateral parts below the upper one: nectareous glands four roundish, seated in the hollow of the corolla, formed of the upper segment and the united part of the lateral ones, two of these are at the base of the upper segment, and the two others close to the side of the former; filaments about sixteen, awl-shaped, unequal; germ ovate, hanging on the outside of the corolla by a very long pedicel; style awl-shaped, longer than the germ, permanent; stigmas three, reflex, half two-cleft. In South America a strong decoction of this plant, especially of the stalks, is given in venereal cases, and in suppressions of the menses.—*Jacquin*.

3. HYPERICIFOLIA. HYPERICUM-LEAVED.

Tithymalis erectus, acris parietaræ foliis glabris, floribus ad caulium nodos conglomeratis. Sloane, v. 1, p. 197, t. 126. *Minima reclinata, foliolis ovatis denticulatis ab altero latere majoribus; floribus quasi umbellatis, terminalibus et lateralibus.* Browne, p. 235, E. 2.

Leaves serrate, oval oblong, smooth; corymbs terminating, branches divaricate.

This is an annual plant, which rises with a branching stalk about two feet high, herbaceous, diffused, subdivided, round, coloured, smooth; branches alternate, spreading, pubescent: leaves petioled, opposite, oblique at the base, ovate, obtuse, veined, glaucous underneath, sometimes purplish; stipules simple, opposite, very short, blunt, between the petioles. Peduncles axillary, alternate, erect, dichotomous, commonly longer than the leaves, with the flowers crowded together. Calyx very minute; petals four, convex, thick, green; filaments two or three, longer than the corolla, with rudiments of others at the base; anthers in pairs, like bifid filaments, yellow; germ smooth; capsule pedicelled. Native of most of the West-India islands, and a weed in cultivated grounds.—*Swartz*. Sloane says every part of this plant is poisonous to hogs; and its milk rubbed on warts cures them; the flowers white or purple. Browne says it is common about the Ferry, and a slender weakly creeper, running only three or four inches.

4. HIRTA. HAIRY.

Tithymalius dulcis parietariæ foliis hirsutis, floribus ad caulium nodos conglomeratis. Sloane, v. 1, p. 197. *Reclinata minor sub-hirsuta, foliis serratis oppositis, florum fasciculis axillaribus.* Browne, p. 234, E. 1.

Leaves serrulate, ovate-acuminate, peduncles in axillary heads, stems hairy.

Stem herbaceous, sub-divided, declined, from three inches to a foot in length, round; leaves on very short petioles, opposite, small, oblique at the base, nerved, rough with hairs, paler underneath, spotted with red; stipules in pairs, opposite, awl-shaped. Peduncles opposite, very short, much shorter than the leaves; flowers crowded together, pedicelled, minute. Calyx blood-red; petals four, truncate, thick, blood-red; filaments four, and not more, awl-shaped, from the bottom of the calyx, longer than the corolla; anthers roundish whitish, two-valved; germ rough with hairs.—*Swartz*. The creeping hairy spurge is common in all the dry savannas in Jamaica. It probably is a powerful resolute and deobstruent, for it provokes both sweat and urine very abundantly, and I doubt not may be given with success in most diseases arising from a lentor or spissitude of the juices — *Cajucia*, alias *caacica*. The Brasilians set a very great value upon this plant. *Piso* saith, it is one of the best antidotes in the world to expel all sorts of poison; even, saith

saith he, when it hath reached the very heart, which it corroborates and sets a beating, when just leaving off its office of pulsation, and causes the blood to circulate again, and that by only giving a pugil of the dried herb in a proper vehicle, or by giving the juice of the green herb; also, the herb decocted, or infused in wine, doth the same. The green herb, bruised and applied as a poultice, to the part bit or stung by any serpent or venomous creature, it immediately takes away the pain, and draws out the venom, preventing it spreading all over the body of fluids: From experience, saith Piso, one drop of the juice of this plant, dropped upon a serpent, immediately kills it; and for that reason, there is no prudent person, that goes in the woods of Brasil, will go without some of this herb. A bath made of the whole plant, with cotton-tree bark, takes away carbuncles and phlegmons. It is also experienced to be excellent in all venereal cases, as also a specific remedy in the belly-ache, as you may see by dr. Trapham's account of it, in his State of Health of Jamaica; where he says, "As for a specific for the dry belly-ache, take an Indian one (for the Indians have many such), which my worthy friend and sagacious, dr. Lawford, of the island of Barbadoes, communicated to his excellency lord Vaughan, by whose favour, for the benefit of the afflicted," saith dr. Trapham, "it was communicated to me: The said dr. Lawford affirmed, that he had had above one hundred trials of this plant, of which, saith he, I give a drachm of it powdered, in any convenient liquor, and repeat it, once in three or four hours, till the usual symptoms of the disease abate: sometimes, I give it made into a syrup, of which I give one ounce to three; also, in decoctions and clysters. It is also, said the same doctor, an antidote against poison, and a great diaphoretic, expelling all malignancies in fevers." Trapham saith, the English in Barbadoes called it snake-weed; "and," saith he, "after the symptoms of the belly-ache are removed by this specific plant, I would have them apply a plaister of the hog-gum to the weak limbs, using warm frictions, and renewing the plaister every twenty-four hours, which restores the use of the limbs," &c. *Barham*, p. 180.

5. HYSSOPIFOLIA. HYSSOP-LEAVED.

Dichotoma erecta tenuis, foliis linearibus, floribus quasi umbellatis terminalibus. Browne, p. 235, E. 4.

Leaves sub-crenate linear, flowers fascicled terminating, stem upright.

6. CHAMÆSYCE. CRENATED.

Minima supina rufescens, foliolis subrotundis nitidis oppositis, ramulis floriferis foliolatis ad alas alternas. Browne, p. 236, E. 8.

Leaves crenulate, roundish, smooth, flowers solitary axillary, stems procumbent.

Stems herbaceous, from two to four inches long, round, purplish; branches dichotomous, short, those which bear flowers procumbent; leaves petioled, opposite, small, veined, dotted, purplish green, glaucous underneath; flowers very minute, crowded, subsessile; teeth of the calyx white ciliated; petals between these blood-red; filaments two or three (not more) very minute; anthers black, germ bent down; styles blood-red; seeds roundish, angular, black.—*Swartz*. This is very like the second species, and common in all the unfrequented streets and gardens about Kingston; but the leaves are whole, and the flowers seem differently disposed.—*Browne*.

7. GRAMINEA. GRASS.

Trichotoma, foliis ovatis verticilliter ternatis, fasciculis florum sparsis. Browne, p. 235, E. 3.

Leaves.

Leaves lanceolate-elliptic, petioled, quite entire, stem upright, peduncles dichotomous.

Stems herbaceous, upright but not weak, entirely green, dichotomous, tender, from two to three feet high, leaves acute, shining, an inch and a half long, few, on petioles an inch in length; peduncles terminating, upright, slender. Calyx bell-shaped, hirsute within; petals two, roundish, quite entire, white; capsules shining, smooth, small. —*Jacquin*. The trichotomous spurge, with verticillated leaves grows very common on both sides of the road between Kingston and Hunt's Bay, it is furnished with moderately thick branches, but seldom rises above four feet high. *Browne*.

8. MYRTIFOLIA. MYRTLE-LEAVED.

Leaves quite entire, roundish, emarginate, hoary underneath, flowers solitary, stem upright.

Stem shrubby, from one to two feet high, very much branched, round, smooth; branches almost filiform, long, sub-divided, thickened at the petioles, smooth, red. Leaves opposite, small, the lower ones orbiculate, the upper ob-ovate, oblong, or roundish, smooth, glaucous underneath, flat, spreading, on very short red petioles. Flowers minute, axillary, especially towards the ends of the branches, on very short peduncles; calyx four or five toothed, hirsute within; petals four, thick, roundish, depressed, yellow; filaments two, very minute; anthers roundish, whitish, large; germ bent down; styles reflex; stigmas simple acute. Some of the flowers are barren, and have a cylindric germ, and a single style which is long and trifid at top. Native of Jamaica on cooler mountains. *Swartz*.

9. OBLITERATA. OBLITERATED.

Leaves oblong trapezoid, serrate, pubescent, obliterated on one side of the base. Stems hirsute; leaves attenuated at the top.

10. PUNICEA. SCARLET.

Umbel quinquefid, trifid, involucels ovate, acuminate, coloured; capsules smooth; leaves ob-ovate lanceolate.

This most splendid plant, by far the most beautiful of the genus, is the height of a man, the stem shrubby, rather fleshy, full of milky juice, round, abruptly branched; the branches curved upwards three together; the smaller branches sometimes four or five together; bark smooth, whitish, marked with spots or scars where former leaves have grown. Leaves on the summits of the smaller branches, crowded together, almost sessile, spreading in every direction, bluntish, ending in a small point, smooth, opaque, dark green, glaucous underneath; the younger ones turned inwards, and those nearest the umbels coloured; principal nerve of all the leaves dull yellow, and in the younger ones near the umbels, it is besides stained with red; umbels terminating, erect, having five, six, or seven rays. Peduncles club-shaped, smooth, dichotomous; involucels two or three together under each flower, of a most vivid scarlet; flowers solitary, turbinate, yellowish, soon turning reddish. Calyx five-toothed; petals five, divaricated, yellow, full of very sweet pellucid honey, stamens fifteen or twenty fertile, many abortive; germ reflex, styles reflex, red; receptacle occupied by chaffy branched filaments; capsule smooth. —Discovered in Jamaica, but sparingly, by Mathew Wallen, esq. who sent it to the late marquis of Rockingham, in 1778. —*Smith*. This beautiful plant grows

grows plentifully in many parts of Jamaica to the height of fifteen or twenty feet or more, and is known by the name Wallenia.

Spurges are generally of one and the same kind, only some more violent in their operation than others, except the sweet spurge called *caiacia*, mentioned before, which hath a quite different nature; for, as all other spurges work upwards and downwards, this doth neither, but operates by sweat and urine. The reason of the others working so strong, is from their abounding with an essential fixed acrid salt and oil, and therefore dangerous to be administered without correcting; but, when corrected, they may be given with safety in dropsies, lethargies, phrensies, &c. You may make an extract of them, which some use as a general purger. Raius saith, that spurge-laurel, powdered and infused in wine-vinegars, cures cancers. *Barham*, p. 182.

See EYE-BRIGHT.

SPURGE, BRANCHED. ERNODEA.

CL. 4, OR. 1.—*Tetrandria monogynia*.

This generic name is derived from the Greek work for branched.

GEN. CHAR.—Calyx a four-parted perianth, small, superior segments erect, acute, equal, permanent; corolla one-petaled, salver-shaped, tube four-cornered elongated; border four-parted; segments lanceolate revolute; stamens four filaments, inserted in the middle of the tube, awl-shaped, longer than the corolla; anthers erect, acuminate; the pistil has a four-cornered inferior germ, a filiform style, longer than the stamens; and an obtuse emarginate stigma; the pericarp a roundish berry, crowned by the calyx, two-grooved, two-celled; seeds solitary, hemispherical striated.

LITTORALIS.

Thymelea humilior foliis acutis atrovirentibus. Sloane, v. 2, p. 93, t. 189, f. 1, 2. *Knoxia*, 1. *Littoralis repens, foliis rigidis oblongis oppositis, floribus singularibus*. Browne, p. 140.

Root as thick as the little finger, of a reddish brown colour, and rugged bark, with several roundish branches; stem angular, bark grey; branches four-cornered, wand-like, jointed, ash-coloured, leafless; branchlets alternate, two inches long; leaves on the branchlets opposite, sessile, an inch and a half long, lanceolate, attenuate at both ends, veinless, obscurely three-nerved or five-nerved, very smooth on both sides, shining, quite entire, mucronate, cused, of an astringent taste; stipules surrounding the branch, truncate, ciliate. Flowers axillary opposite sessile; calyx deeply four-parted, with lanceolate cusped segments; tube of the corolla slender, longer than the calyx; segments of the border linear obtuse; stamens the length of the corolla; stigma truncate. It varies with broader and narrower leaves. The flowers are pale yellow or greenish coloured. It grows on the pallsades near Port-Royal, and on most sandy beaches. Browne calls it the creeping sea-side *Knoxia*, frequent near the shore in the parish of St. George, running commonly three or four feet, or more, along the ground, casting a few spreading branches from space to space as it creeps along; the leaves are oblong, pointed, and stiff, and the flowers few and single, at the axils of the upper leaves.

SQUASH

SQUASH.

CUCURBITA.

CL. 21, OR. 1.—*Monoecia syngenesia*.NAT. OR.—*Cucurbitaceæ*.

GEN. CHAR.—See Gourd, v. 1, p. 332.

MELOPEPO.

Leaves lobed, stem erect, fruits flatted knobby. The erect gourd, or squash, rises erect by a strong stalk, sending out procumbent branches on every side, which are hairy and tendriled, creeping for several feet on the ground around the main stem. The leaves are lobed, hairy, alternate, on long petioles. The flowers are yellow, on lateral one-flowered peduncles; segments of the calyx linear spatulate, spreading; anthers linear, distinct, erect; succeeded by depressed knobby fruit, of a whitish yellow colour, and growing sometimes as large as a moderate fist. When young and properly boiled and dressed with butter and black-pepper they are a delicious vegetable. Loureiro says the fruit is of great use in long voyages, as it may be kept several months fresh and sweet.

See GOURD—PUMPKIN—WATER-MELON.

No English Name.

STAPHYLEA.

CL. 5, OR. 3.—*Pentandria trigynia*.NAT. OR.—*Trihilatæ*.

GEN. CHAR.—Calyx a five-parted perianth; corolla five oblong petals; nectary concave, pitcher-shaped; stamens five oblong filaments with simple anthers; the pistil has a thickish three-parted germ, three simple styles with obtuse stigmas; the pericarp three-inflated capsules; seeds two, globular with a wart.

OCCIDENTALIS. WESTERN.

*Pruno forte affinis arbor folio alato, flore herbaceo pentapetalo racemoso.*Sloane, v. 2, p. 128, t. 220, f. 1. *Foliis oblongo ovatis, pinnatis, nitidis; racemis laxis, rarioribus.* Browne, p. 279.

Leaves doubly pinnate, capsules three-cornered, seeds solitary, stem arboreous. This is a tree from twenty to thirty feet high, with a smooth unarmed trunk, and round smoothish shining branches. Leaves petioled, alternate, pinnae two or three pairs with an odd one, petioled, ovate, acuminate, serrate, smooth, shining; petioles both general and partial roundish, smooth; stipules in pairs between the pinnae, minute, curved in panicles terminating, erect, loosish, with opposite decussated branches, and three-flowered pedicels. Flowers white, odorous, calyx five-leaved, the two inner leaflets the size of the petals; capsule the size of a cherry, smooth, not inflated, three-celled. Native of Jamaica, flowering there in spring and autumn.—Swartz. Sloane says it grows plentifully between Passage Fort and St. Jago de la Vega. This is the *Trichilia hirta* of Linneus but removed to this genus by Swartz.

See MUSK-WOOD.

STAR APPLE.

CHRYSOPHYLLUM.

CL. 5, OR. 1.—*Pentandria monogynia*.NAT. OR.—*Dumosa*.

GEN. CHAR.—See Damson Plum, v. 1, p. 259.

CAINITO.

Anona, foliis subtus ferrugineis, fructu rotundo majore, levi, purpureo, semine nigro, partim rugoso, partim glabro. Sloane, v. 2, p. 170, t. 229. *Fructu majori globosa, foliis subtus ferrugineis.* Browne, p. 171, t. 14, f. 2.

Leaves ovate, striated in parallel lines, tomentose, and shining underneath.

This tree is cultivated, and grows wild, in most parts of Jamaica, it rises from thirty to forty feet high with a strong stem, covered with brown bark, and divides into many flexible, slender, branches, which generally hang downward, garnished with ovate acuminate, alternate, leaves, on inch long pedicels, about five inches long and two broad in the middle, whose under sides are of a bright russet colour, and silky appearance; their upper surface is of a dark shining green colour. The flowers are axillary and lateral, in small clusters, of a purplish white colour; many of them have six segments in the calyx and corolla, and six stamens, most of them however have only five. It is said the fruit never drops of itself but withers on the tree, if not plucked.

Some trees bear fruit with a purple, and some with a white, skin and pulp, which, when soft, is like jelly, with milky veins, of a sweet and pleasant taste. The seeds are shining black, of a rhomboidal figure, having a slit on one of their edges.

This tree grows from the seeds, and thrives with little care. Like the achras, (to whom both the fruit, seeds, and other particulars, seem to shew it nearly allied) it is full of milk, and the fruit retains it even in the most perfect state; but, though this juice be rough and astringent in the bark, and other parts of the tree, and even in the fruit before it ripens, yet, when it grows to full perfection, it becomes sweet and gelatinous, with an agreeable clamminess, and is very much esteemed. The juice of this fruit (a little before it is perfectly ripe) being mixed with a small quantity of orange juice (or eating both fruit at a time) binds the body more than any thing I have ever known, and doubtless would make a very powerful remedy on many occasions; but I doubt if the action of the fire would not take off a great deal of the native roughness of the juice, in case it had been inspissated by that means.

I doubt if this ought to be separated from the achras on any account, though the characters of the flower differ in many respects; the *germen* has ten distinct lodges, but most of the seeds abort, and, when the fruit is ripe, it seldom contains above four or five. *Browne.*

STAR OF BETHLEHEM.

HYPOXIS.

CL. 6, OR. 1.—*Hexandria monogynia*.NAT. OR.—*Coronaria*.

This generic name is derived from a Greek word for sharpish.

GEN. CHAR.—Calyx a two-valved glume; corolla one-petaled, six-parted, permanent, superior; stamens six filaments, with oblong anthers; the pistil has an inferior

ferior germ, a filiform style and bluntish stigma: the pericarp a somewhat oblong capsule, narrower at the base; seeds many, roundish.

DECUMBENS. TRAILING.

Herbaceum, foliis gramineis, floribus geminatis pedunculis longissimis alaribus incidentibus. Browne, p. 195.

Hairy, with club-shaped capsules.

Bulb roundish, fleshy, brown, putting out fibres from the side. Leaves radical, sheathing at the base, forming as it were a short stem, grassy, keeled, a span long, recurved, sharp, striated, somewhat hairy. Peduncles radical from the sheaths among the leaves, about flowering time short, but afterwards lengthened out, filiform, two-edged, few-flowered; spathes two-leaved, leaves small, linear, pubescent. The three outer parts of the corolla lanceolate, acute, hairy on the outside, permanent; the three inner smooth, yellowish, greenish on the outside, withering; stamens alternate with the segment of the corolla, three longer, three shorter; anthers saggitate; germ oblong; style awl shaped, stigma blunt; capsule oblong, three-cornered, crooked, rough with hairs, crowned with the permanent corolla; seeds wrinkled, black.—*Swartz*. Browne calls it the grassy leaved *ornithogalum*, frequent in Sixteen-Mile Walk, and many other places in Jamaica.

STAVE-WOOD—See MOUNTAIN DAMSON.

STERTIAN—See INDIAN CRESS.

STINKING-WEED.

CASSIA.

CL. 10, OR. 1.—*Decandria monogynia*. NAT. OR.—*Lomentaceæ*.

GEN. CHAR.—See Cane-Piece Sensitive, v. 1, p. 151.

OCCIDENTALIS. WESTERN.

Senna occidentalis, odore opii viroso, orobi pannonicæ foliis mucronatis, glabra. Sloane, v. 2, p. 48. *Herbacea major erecta ramosa, foliis ovato acuminatis, siliquis angustioribus compressis, spicis laxioribus terminalibus assurgentibus.* Browne, p. 224.

Leaflets five pairs, ovate-lanceolate, scabrous about the edge, the outer ones larger, a gland at the base of the petioles.

Stem from two to three feet high; it is loose in its ramifications and well supplied with flowers, disposed in loose spikes at the extremity of the branches. The ribs on which the leaves are set, are, in almost every species of this kind, furnished with a gland, which in some is placed higher, in others lower upon the shank, and in many between the leaves themselves; but in this particular sort it is situated very low, and near the insertion of the rib.

Piso says, that the juice of this plant applied outwardly, or injected, is a specific in the inflammations of the anus; and Markgrave adds, that the root is a powerful diuretic and antidote: but the top is the only part that is used in Jamaica, where the plant is commonly employed in all resolute baths, and is accounted a very powerful ingredient on such occasions.—*Browne*.

This plant is commonly known by the name of *piss a bed*, and is very common in Jamaica. The root in decoction is used as a diuretic, as also for venereal and other complaints. The decoction is also recommended for a scalding of urine; and the fomentation is good for the mange in dogs, mules, and horses; and it is useful to give them the plant inwardly, by chopping it up in their food. The leaves as well as the roots decocted are excellent in jaundice and dropsy, and when taken inwardly and applied outwardly drive out and cure the scorbutic itch, ringworms, and other cutaneous complaints. Like other bitter plants, when taken inwardly, it sometimes occasions griping, which is cured by acids. For this reason Barham directs a decoction of the *solanum mammosum*, (see Turkey berries) for the itch to be given in sugar and lime-juice. For a venereal or weakness the following has been recommended: "Take the root of piss-a-bed, boil a large handful in three quarts of water, letting it boil down to two quarts and a pint; when cold drink the same for common drink, and it will make a perfect cure; observing that it be taken in an early stage and regularly continued"

See CANE-PIECE SENSITIVE—CASSIA-STICK TREE—HORSE-CASSIA—RINGWORM SHRUB
—and SENNA TREES.

STOCKVISHHOUT—See NICARAGUA.

STRAINER-VINE—See CERASEE.

STRAWBERRY PEAR—See INDIAN FIG.

STYPTIC BUSH—See BASTARD IPECACUANHA and VERVAIN.

SUGAR BEAN—See KIDNEY BEAN.

SUGAR-CANE.

SACCHARUM.

CL. 3, OR. 2.—*Triandria digynia*. NAT. OR.—*Graminae*.

GEN. CHAR.—Calyx a two-valved glume, one-flowered; valves oblong lanceolate, acuminate, erect, concave, equal, awnless, surrounded with a long lanugo at the base: corolla two-valved, shorter, sharpish, very tender: nectary two-leaved, very small: stamens three filaments, capillary, the length of the corolla; anthers somewhat oblong: the pistil has an oblong germ, two feathered styles, and plamose stigmas; no pericarp; the corolla invests the seed; which is single and oblong.

OFFICINARUM.

OFFICINAL.

Geniculatum et succulentum, paniculum spatiosa. Browne, p. 129.
Sloane, t. 66.

Flowers panicled, leaves flat.

The root of the sugar cane is jointed, like that of other sorts of cane or reed. From this arise four five or more shoots, proportionable to the age or strength of the root, eight or ten feet high, according to the goodness of the ground; in some moist rich soils canes have been measured near twenty feet long, but these are not so good as those of middling growth, abounding in juice, but having little of the essential salt. The canes are jointed, and these joints are more or less distant, in proportion to the soil. A leaf is placed at each joint, and the base of it embraces the stalk to the next joint above its insertion, before it expands; from hence to the point it is three or four feet

feet in length, according to the vigour of the plant; there is a deep whitish furrow or hollowed midrib, which is broad and prominent on the under side; the edges are thin and armed with small sharp teeth, which are scarcely to be discerned by the naked eye, but will cut the skin of a tender hand, if it be drawn along it. The flowers are produced in panicles at the top of the stalks; they are from two to three feet long, and are composed of many spikes nine or ten inches in length, which are again subdivided into smaller spikes; these have long down inclosing the flowers, so as to hide them from the sight. The seed is oblong, pointed, and ripens in the valves of the flower.

It has been asserted that the sugar-cane is not indigenous to America, but that it migrated through Europe, which may be doubted, as Father Hennepin, in 1680, found it growing near the mouth of the Mississippi for thirty leagues; and Francis Ximenes, Hernandes, and Piso, all affirm that the sugar-cane grows spontaneously near the Rio de la Plata. Jean de Lery, who went to Rio Janeiro in 1556, also asserts that he found every where near that river a great quantity of sugar canes. It is thought by some that Columbus introduced the plant into Hispaniola in his first voyage; but the opinion that it may be a native of America and the West-Indies is much strengthened by the sugar-cane having been found in such plenty in the South Sea islands: certain it is, however, that none of them have ever been found in a wild or indigenous state in Jamaica, where, without cultivation, it is probable, they would in time be totally lost. Sugar is thought to have been first introduced into Europe during the crusades, from the east. Its use (which was confined to medical purposes) in Sicily is mentioned in the year 1166. Thence it was conveyed to Spain, Madeira, the Canary and Cape de Verde islands, soon after they were discovered in the fifteenth century; and from one of these islands it is supposed to have found its way to the West-Indies.

The sugar-cane was first planted in Jamaica by the English, by Sir Thomas Modvford, in 1660, and sugar first made there in 1664; but some plantations were made while in possession of the Spaniards, by Esquimel, a Spanish governor under Diego Columbus; and there were, on the arrival of the English, three small plantations on the island, the chief of which was at the Angels. In other islands the English made sugar as early as 1643.

There are several varieties of this valuable plant; but the cultivation of all has been for some years past greatly neglected, to make room for the introduction of the Bourbon or Otaheite cane, which was brought here in the year 1796, and has since been generally cultivated. This cane is of a much larger size than any other, the joints frequently measuring eight or nine inches, and of a proportionate thickness, the common cane seldom exceeded two or three inches; they have consequently been found very productive, and their sugar also of a superior quality. An acre of them, in good land, has been found to produce from four to five hogsheads, of which the same quantity in common canes would only produce one. The juice of the Bourbon cane is of a paler colour, and they are ripe enough to grind in ten months; if allowed to remain a longer time uncut, they lose part of their juices. From their size they resist dry weather much better than any other cane, and are not near so subject to suffer from that destructive insect the borer. With all these seeming advantages, it is no wonder if they entirely superceded the use of all other varieties of the sugar-cane in Jamaica. They, however, more speedily exhaust the soil, and it may be questioned, whether, in the course of time, they will not themselves dwindle, from repeated transplantation in a foreign soil, which all exotics do; and which, indeed, has already been found the case, in a considerable degree, on many plantations. The old cane, it is acknowledged, pos-
sessed

essed richer juices than the new, and its tops afforded a much greater quantity of fodder for cattle, which considerations, added to that of their not impoverishing the soil so much as the other, renders it very doubtful whether the ultimate benefit will be so great as was expected.

The manner of planting the sugar-cane, and the manufacture of it, are so well known as to require no lengthy description. The soil should be rich, deep, and free, the situation warm, and such as has, at least, moderate seasons.

Previous to digging the caneholes the land is lined into small squares of three feet and a half, marked by pegs, and a negro is placed opposite to each square to dig up the mould, and form a trench six or eight inches deep, throwing the mould into a bank, forming ridges like the plough, which instrument of agriculture has been successfully introduced on many plantations, where the nature of the land will admit. These ridges of earth are afterwards gradually drawn round the roots of the canes as they grow. The cuttings or plants of the canes, containing each five or six gems or eyes, are placed horizontally at the bottom of the holes, and covered with mould from the banks about two inches deep. In twelve or fourteen days the sprouts appear, and, being moulded as they grow, the ridges of earth are entirely levelled in four or five months. It is scarcely necessary to mention that the ground should always be kept clear of weeds, which will ensure the plants arriving at perfection, unless attacked by what is called the blast, which often destroys whole fields of canes, and is occasioned by myriads of an invisible insect, appearing like white spots or blotches upon the cane, supposed to be the aphid of Linneus, for which no effectual remedy has yet been found: Edwards mentions, indeed, the raffle ant, which, he says, will also clear a plantation of these destructive animals rats*, a ruinous enemy to the sugar-cane; he, however, has his doubts. The same author enumerates the most convenient and proper manures for cane fields, as follow: 1st, Of the coal and vegetable ashes, drawn from the fires of the boiling and still houses. 2d, Feculencies discharged from the still house, mixed up with rubbish of buildings, white lime, &c. 3d, Refuse or field trash, *i.e.* the decayed leaves and stems of the canes, so called in contradiction to cane-trash, reserved for fuel. 4th, Dung obtained from the horse and mule stables, and from moveable pens, or small enclosures made by posts and rails, occasionally shifted upon the lands intended to be planted, and into which the cattle are turned at night. 5th, Good mould, collected from gullies, and other waste places, and thrown into the cattle pens.

The canes being arrived at maturity are cut and carried to the mill in bundles, the branches at the top being chopped off, and are an excellent food for the cattle. The top shoot, which is full of eyes, is generally preserved for planting. The mill consists principally of three upright iron plated rollers or cylinders, from thirty to forty inches in length, and from twenty to twenty-five inches diameter; and the middle one, to which the moving power is applied, turns the other two, by means of cogs. Between these rollers, the canes being previously cut short and tied into bundles, are twice compressed; for, having passed through the first and second rollers, they are turned round the middle one, by a circular piece of frame work, or screen, called the dumb returner, and forced back through the second and third; an operation which squeezes them completely dry. The juice is received in a leaden bed, and thence conveyed into a vessel called the receiver. The refuse, or macerated rind of the cane, which

* There is an East-India animal called *mungoes*, which bears a natural antipathy to rats; if this animal was introduced here, it might probably extirpate the whole race of these noxious vermin.

which is called cane trash, in contradistinction to field trash, serves for fuel to boil the liquor. The juice, as it flows from the mill, taken at a medium, contains eight parts of pure water, one part of sugar, and one part consisting of coarse oil and mucilaginous gum, with a portion of essential oil.

As this juice has a strong disposition to fermentation, it must be boiled as soon as possible. There are some water mills that will grind, with great ease, canes sufficient for thirty hogsheads of sugar in a week. It is necessary to have boiling vessels, or clarifiers, that will correspond in dimensions to the quantity of juice flowing from the receiver. These clarifiers are commonly three in number, and are sometimes capable of containing one thousand gallons each; but it is more usual to see them of three hundred or four hundred gallons each. Besides the clarifiers, which are used for the first boiling, there are generally four coppers or boilers. The clarifiers are placed in the middle or at one end of the boiling house. If at one end, the boiler called the *teache* is placed at the other, and several boilers (generally three) are ranged between them. The *teache* is ordinarily from seventy to one hundred gallons, and the boilers between the clarifiers and *teache* diminish in size from the first to the last. Where the clarifiers are in the middle, there is usually a set of three boilers on each side, which constitute, in effect, a double boiling house. On very large estates this arrangement is found useful and necessary. The objection to so great a number is the expence of fuel; to obviate which, in some degree, the three boilers on each side of the clarifiers are commonly hung on one fire.

The juice runs from the receiver along a wooden gutter lined with lead, into the boiling house; where it is received into one of the clarifiers. When the clarifier is filled, a fire is lighted, and a quantity of Bristol quick-lime in powder, which is called *temper*, is poured into the vessel. The use of the lime is to unite with the superabundant acid, which, for the success of the process, it is necessary to get rid of. The quantity sufficient to separate the acid must vary, according to the strength of the quick-lime, and the quality of the liquor. Some planters allow a pint of lime to every hundred gallons of liquor; but Mr. Edwards thinks that little more than half the quantity is a better medium proportion, and even then, that it ought to be dissolved in boiling water*, that as little as possible may be precipitated. The heat is suffered gradually to increase till it approaches within a few degrees of the heat of boiling water, that the impurities may be thoroughly separated. But if the liquor were suffered to boil with violence, the impurities would again incorporate with it.

It

* Mr. Charles Blackford, of St. Mary's, has lately discovered a new method of clarifying raw cane juice, for which he received a reward from the House of Assembly. It consists in clarifying the juice in its raw state, which he says not only improves the quality of sugar but renders it much purer, and sooner to be boiled to granulation. Far less fuel is consumed, and labour reduced, by this simple process, which is merely to apply as much temper lime to the raw cane-juice in the receiver as to cause a curdle, which separates the mucilaginous substance from the saccharine juice, and is effected in about ten minutes. A glass, say a pint or a half-pint tumbler, dipped immediately after tempering in the receiver, is a guide; for when the precipitation takes place in the glass it will in the receiver. Generally speaking, he found one quart of good temper lime necessary for one hundred gallons of liquor, allowances to be made for canes of different qualities. He recommends two cocks to the receiver, one in the middle and the other two inches from its bottom, the liquor may be frequently drawn off by the middle plug, and the receiver as often replenished. By this means the liquor was found to come up sooner in the boilers, and had not one-tenth of the usual skimmings; and the liquor in a few minutes was cleaner in the grand copper, than it was before in the second, or even first, *teache*. When he came to skip the sugar it was as different from what was making before as possible, and greatly superior in quality. In one instance Mr. Blackford found one hundred and twenty ounces of temper lime necessary to effect his purpose on four hundred gallons of cane-liquor.

It is known to be sufficiently heated when the scum begins to rise in blisters, which break into white froth, and appear generally in about forty minutes. The fire is then suddenly extinguished by means of a damper, which excludes the external air, and the liquor is allowed to remain about an hour undisturbed, during which period the impurities are collected in scum on the surface. The juice is then drained off, either by a syphon or a cock; the scum, being of a tenacious or gummy nature, does not flow out with the liquor, but remains behind in the clarifier. The liquid juice is conveyed from the clarifier by a gutter into the evaporating boiler, commonly termed the grand copper, and, if it has been obtained from good canes, it generally appears transparent.

In the evaporating boiler, which should be large enough to receive the contents of the clarifier, the liquor is allowed to boil; and, as the scum rises, it is taken off. The scumming and evaporation are continued till the liquor becomes finer and thicker, and so far diminished in bulk that it may be easily contained in the second copper. When put into the second copper, it is nearly the colour of Madeira wine; the boiling and scumming are continued, and, if the impurities be considerable, a quantity of lime-water is added. This process is carried on till the liquor be sufficiently diminished in quantity to be contained in the third copper. After being purified a third time, it is put into the fourth copper, which is called the *teache*, where it is boiled and evaporated till it is judged sufficiently pure to be removed from the fire; of which there are various methods of judging.

The juice being thus purified is poured into coolers, usually six in number. The removal from the *teache* to the cooler is called *striking*. The cooler is a shallow wooden vessel, seven feet long, from five to six wide, about eleven inches deep, and capable of containing a hogshead of sugar. As the liquor cools, the sugar grains, that is, collect into an irregular mass of imperfect chrystals, separating itself from the melasses. It is then removed from the cooler, and conveyed to the curing house, where the melasses drain from it. For receiving them there is a large cistern, the sloping sides of which are lined with boards. Directly above the cistern a frame of joist work without boarding is placed, on which empty hogsheads without heads are ranged. The bottoms of these hogsheads are pierced with eight or ten holes, in each of which the stalk of a plantain leaf is fixed so as to project six or eight inches below the joists, and rise a little above the top of the hogshead. The hogsheads being filled with the contents of the cooler, consisting of sugar and melasses, the melasses being liquid drain through the spungy stalk, and drop into the cistern. After the melasses are drained off, the sugar becomes pretty dry and fair, and is then called *muscovado* or *raw sugar*.

From the melasses, scummings of the hot cane-juice, or sometimes raw cane-liquor, lees, or as it is called in Jamaica, dunder, (which answers the purpose of yeast in the fermentation of flower), rum is made.

The process is as follows, when the ingredients are mixed in the following proportions; according to Mr. Edwards:

Dunder one half, or	50 gallons.
Sweets, 12 <i>per cent.</i> { Melasses	6
Scumming, being equal to six gallons more of	
melasses	36
Water	8
	100

Of this mixture, (or wash as it is sometimes called) twelve hundred gallons ought to produce three hundred of low wines. The method of adding all the melasses at once, which is done after the fermentation commences, renders the process safe and expeditious; whereas by charging the melasses at different times, the fermentation is checked and the process delayed.

These ingredients are well mixed and fermented in cisterns for seven or eight days, when it throws up clear beads or globules, and is fit for distillation. The first distillation produces a spirit called *low wines*. To make it rum of Jamaica proof it undergoes a second distillation. Thus two hundred and twenty gallons of proof rum are made from five hundred and thirty of low wines; or about one hundred and thirteen of rum from one thousand two hundred of wash.

Sugar is soluble in water, and in a small degree in alcohol. When united with a small portion of water, it becomes fusible; from which quality the art of preserving is indebted for many of its preparations. It is phosphoric and combustible; when exposed to fire emitting a blue flame if the combustion be slow, and a white flame if the combustion be rapid. By distillation it produces a quantity of phlegm, acid, oil, gas, and charcoal. Bergman, in treating sugar with the nitrous acid, obtained a new acid now known by the name of the *oxalic acid*; but he has omitted to mention the principles of which sugars are composed. Lavoisier, however, has supplied his omission; and, after many experiments has assigned three principles in sugar, hydrogen, oxygen, and carbone. If the juice expressed from the sugar-cane be left to itself, it passes into the acetous fermentation; and, during the decomposition of the juice, which is continued for three or four months, a great quantity of glutinous matter is separated. This matter, when distilled, gives a portion of ammoniac. If the juice be exposed to the spirituous fermentation, a wine is obtained analogous to cyder. If this wine, after being kept in bottles a year, be distilled, we obtain a portion of *eau de vie*.

The uses to which sugar is applied are indeed numerous and important: It can be made so solid as in the art of preserving to receive the most agreeable colours, and the greatest variety of forms. It can be made so fluid as to mix with any soluble substance. It preserves the juice and substance of fruits in all countries, and in all seasons. It affords a delicious seasoning to many kinds of food. It is useful in pharmacy, for it unites with medicines and removes their disagreeable flavour: it is the basis of all syrups. M. Macguer has shewn, in a very satisfactory manner, how useful sugar would be if employed in fermenting wines. Sugar has also been found a remedy for the scurvy, and a valuable article of food in cases of necessity. M. Imbert de Lennes, first surgeon to the late Duke of Orleans, published the following story in the *Gazette de Seneté*, which confirms this assertion: "A vessel laden with sugar, bound from the West-Indies, was becalmed in its passage for several days, during which the stock of provisions was exhausted. Some of the crew were dying of the scurvy, and the rest were threatened with a still more terrible death. In this emergency recourse was had to the sugar. The consequence was, the symptoms of the scurvy went off, the crew found it a wholesome and substantial aliment, and returned in good health to France."

"Sugar," says Dr. Rush, "affords the greatest quantity of nourishment, in a given quantity of matter, of any substance in nature; of course it may be preserved in less room in our houses, and may be consumed in less time, than more bulky and less nourishing aliment. It has this peculiar advantage over most kinds of aliment, that it is not liable to have its nutritious qualities affected by time or the weather; hence it is preferred by the Indians in their excursions from home. They mix a certain quantity

of maple sugar with an equal quantity of Indian corn, dried and powdered, in its milky state. This mixture is packed in little baskets, which are frequently wetted in travelling, without injuring the sugar. A few spoonfuls of it, mixed with half a pint of spring water, afford them a pleasant and strengthening meal. From the degrees of strength and nourishment which are conveyed into animal bodies, by a small bulk of sugar, it might probably be given to horses with great advantage, when they are used in places or under circumstances which make it difficult or expensive to support them with more bulky or weighty aliment. A pound of sugar, with grass or hay, has supported the strength and spirits of an horse during a whole days labour in one of the West-India islands. A larger quantity given alone has fattened horses and cattle, during the war before last, in Hispaniola, for a period of several months, in which the exportation of sugar, and the importation of grain, were prevented by the want of ships.

“The plentiful use of sugar in diet is one of the best preventatives that has ever been discovered of the diseases which are produced by worms. Nature seems to have implanted a love for this aliment in all children, as if it were on purpose to defend them from those diseases. Dr. Rush knew a gentleman in Philadelphia, who early adopted this opinion, and who, by indulging a large family of children in the use of sugar, has preserved them all from the diseases usually occasioned by worms.

“Sir John Pringle has remarked, that the plague has never been known in any country where sugar composes a material part of the diet of the inhabitants. Dr. Rush thinks it probable that the frequency of malignant fevers of all kinds has been lessened by this diet, and that its more general use would defend that class of people who are most subject to malignant fevers from being so often affected by them.

“In the numerous and frequent disorders of the breast, which occur in all countries where the body is exposed to a variable temperature of the weather, sugar affords the basis of many agreeable remedies. It is useful in weaknesses, and acrid defluxions upon other parts of the body. Many facts might be adduced in favour of this assertion. Dr. Rush mentions only one, which, from the venerable name of the person whose case furnished it, cannot fail of commanding attention and credit. Upon my enquiring of Dr. Franklin, at the request of a friend (says our respectable author) about a year before he died, whether he had found any relief from the pain of the stone from the blackberry jam, of which he took large quantities, he told me had, but that he believed the medicinal part of the jam resided wholly in the sugar; and, as a reason for thinking so, he added, that he often found the same relief by taking about half a pint of a syrup, prepared by boiling a little brown sugar in water, just before he went to bed, that he did from a dose of opium. It has been supposed by some of the early physicians of our country, that the sugar obtained from the maple tree is more medicinal than that obtained from the West-India sugar-cane; but this opinion I believe is without foundation. It is preferable in its qualities to the West-India sugar only from its superior cleanliness.

It has been said that sugar injures the teeth; but this opinion now has so few advocates that it does not deserve a serious refutation.”

Angelus Sala says that “Sugar, used in a proper manner, nourishes the body, generates good blood, cherishes the spirits, makes people prolific, strengthens children in the womb; and this is not astonishing because it contains similar virtue to the very sweet wines.

“It is serviceable also in complaints of the throat and lungs; hoarseness and difficulty of breathing, arising from an acrid defluxion; for ulcerations of the lungs, chest, kidneys,

neys, and bladder, and to cleanse those parts from purulent matter. It eases pains of the intestines, softens the fœces, and prepares them for expulsion; it cleanses wounds and punctures in the body; also films in the eyes. It removes pains in ulcers and tumours, by concocting the flux of humours; or if they have no tendency to suppuration, by dispersing them."

Baptista Porta, another early writer, says "Sugar, extracted from canes, is not only incorruptible in itself, but preserves all other things from corruption; sprinkled upon wounds it keeps them from mortifying. I have seen very large wounds cured only with sugar*. Therefore, sugar should be constantly used by those who wish to prolong life; because it will not suffer the humours, nor the food, in the body to putrify."

Pomet says "The white and red sugar-candy are better for rheums, coughs, colds, catarrhs, asthmas, wheezings, than common sugar; because, being harder, they take longer time to melt in the mouth, and keep the throat and stomach moister than sugar does. Put into the eyes, in fine powder, it takes away their dimness, and heals them, being blood-shot; it cleanses old sores, being strewed gently on them."

Hermann says "It should not be used in large quantities by the melancholic, hypochondriacal, and hysterical, nor by people in fevers, on account of its proneness to ascrescence.

"With fat broth and *sal gem*, it is used in glysters for children; and it is also given to them, newly born, to relax the bowels, with oil of sweet almonds.

"Taken with oil of sweet almonds, it is a remedy for pains in the bowels."

Boerhaave observes of sugar that it never generates phlegm, but, on the contrary, dissolves it. Neither does it increase the bile, or is converted into it; but opens, attenuates, and divides it. At the same time, by dissolving the oleaginous particles in the body, it may induce leanness; and by too much attenuation, produce debility, and too great laxity."

Dr. Frederick Slare, in speaking of sugar, says, "I will set down an experiment I had from a friend: He was a little lean man, who used to drink much wine in company of strong drinkers; I asked him how he was able to bear it. He told me that he received much damage in his health, and was apt to be fuddled, before he used to dissolve sugar in his wine; from that time he was never sick nor inflamed, nor fuddled, with wine. He usually drank red wine. I made use of sugar myself in red wine, and found the like good effect; that it prevents heating my blood, or giving my head any disturbance, if I drink a larger portion than ordinary. I allow about two ounces of sugar to a pint of wine; and dare assert that this proportion will take off the heating quality of wine in a good measure; and, after one has some time used himself to add sugar to his wine, he will be pleased with the taste, and feel the comfortable and cordial virtue of this composition. Let those that are thin and apt to have hot hands, and heated brains, upon drinking wine, and cannot abstain, or be excused, from drinking, take notice of this counsel, and try it for some time; and they will be pleased with the delicious taste, and salubrious effects, of this saccharine addition."

"In the West-Indies," says Dr. Moseley, "the negro children, from crude vegetable diet, are much afflicted with worms. In crop time, when the canes are ripe, these

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* The method of treating fresh wounds among the Turks, is, first to wash them with wine, and then sprinkle powdered sugar upon them. The celebrated M. Belloste cured obstinate ulcers with sugar dissolved in a strong decoction of walnut leaves. This I have found, says Dr. Moseley, to be an excellent application. Sugar, mixed with the pulp of roasted oranges, and applied to putrid or ill-disposed ulcers, proves a powerful corrector.

these children are always sucking them. Give a negro infant a piece of sugar-cane to suck, and the impoverished milk of his mother is tasteless to him. This salubrious luxury soon changes his appearance. Worms are discharged; his enlarged belly and joints diminish; his emaciated limbs increase; and, if canes were always ripe, he would never be diseased. I have often seen old, scabby, wasted negroes, crawl from the hot-houses, apparently half dead, in crop-time, and by sucking canes all day long, they would soon become strong, fat, and sleeky.

"The restorative power of sugar, in wasted and decayed habits, is recorded by several physicians, in different parts of the world. I have known many people, far advanced in pulmonary consumption, recovered by the juice of the sugar-cane.

"A friend of mine, a clergyman in Shropshire, has favoured me with a very interesting account of a cure performed by the use of sugar, in such a diseased state of the lungs as is generally denominated a complete consumption."

After relating that various methods had failed, and all hopes of recovery lost, Dr. Moseley continues the relation in the gentleman's own words: "I did not take to the use of sugar, until I was reduced to so weak a condition as to be unable to take any thing else. Sugar was never prescribed for me by any physician; but, being very thirsty from the fever, I had a great inclination for spring water; which I was not permitted to have, by the affectionate relative who nursed me, without some muscovado sugar, a little ginger, and a piece of toasted bread in it. I soon became extremely fond of the saccharine taste, and used to sweeten the water to excess. I did not take it as a medicine, nor confine myself to any specific quantity; but always used it, when my appetite or inclination seemed to require it. However, I at length used it in a considerable quantity; some days to the amount, I believe, of eight ounces; and that, with the small portion of toasted bread put into my drink, was the principal part of my sustenance during the greatest part of twelve years; nor did it cease to be so until my stomach became strong, and capable of bearing animal food." Dr. Moseley adds, "He continued in good health from the preceding period until the month of April, 1793, when, in consequence of a neglected cold, he had a return of all his former dangerous symptoms; but, by recurring to his old regimen, he was again restored to health, in about six months time, excepting in strength; which he recovered by degrees. He is now in better health than he ever was before in his life.—1800."

In another place, the Doctor observes, "aged people, who have no teeth, and whose digestive faculties are impaired, and as incapable as those of infants, may, like infants, live on sugar. I could produce many instances where aged people have been supported many years by scarcely any thing but sugar.

"Taken in tea, milk, and beer, it has been found not only sufficient to sustain nature, but has caused lean people to grow fat, and has increased the vigour of their bodies. The late king of Sardinia ate a great quantity of sugar daily. He ate it by itself; without dissolving it, or mixing it with any thing. It was his chief food. After his death his body was opened, and all his viscera were perfectly sound.

"The great Duke of Beaufort, as he was called, who died about an hundred years ago, at the age of seventy, was opened; his viscera was found in the same manner, as perfect as in a person of twenty; with his teeth white and firm. He had for forty years before his death used a pound of sugar daily, in his wine, chocolate, and sweetmeats.

"Slare says, his grandfather, M. Malory, was strong and chearful in his eighty second year; at which time his hair changed somewhat dark; his old teeth came out, pushed away by young ones; which continued so to do until he had a new set of teeth complete.

complete. He lived easy, and free from pain, or sickness, until his hundredth year, when he died. He used sugar to a great degree in all his food, vegetable and animal; and delighted in all manner of sweetmeats. He says, he followed the practice of his grandfather, and used sugar in every thing he ate and drank; and, in the sixty-seventh year of his age all his teeth were sound, and firm, and in their full number.

"I know a person at this time, about eighty years old, who has lived for several years almost on sugar; and is as healthy and strong, and as youthful in appearance as most people at fifty.

"The cause of this fondness for sugar, was a paralytic affection, with which she was attacked nearly twenty years ago, which prevented her, for a considerable time, swallowing any thing but fluids, in which a portion of sugar was dissolved.

"Her diet now consists of sugar, and the simple vehicles in which it is taken; these are tea, milk, gruel, barley-water, roasted and boiled apples, and beer generally for supper."

Mr. Edwards, in his History of the West-Indies, has very justly observed that, "The time of crop in the sugar islands is the season of gladness and festivity to man and beast. So palatable, salutary, and nourishing, is the juice of the cane, that every individual of the animal creation, drinking freely of it, derives health and vigour from its use. The meagre and sickly among the negroes exhibit a surprising alteration in a few weeks after the mill is set in action. The labouring horses, oxen, and mules, though almost constantly at work during this season, yet, being indulged with plenty of green tops of this noble plant, and some of the scummings from the boiling house, improve more than at any other period of the year. Even the pigs and poultry fatten on the refuse."

"He," says Slare, "that undertakes to argue against sweets in general, takes upon him a very difficult task; for nature seems to have recommended this taste to all sorts of creatures; the birds of the air, the beasts of the field, many reptiles and flies, seem to be pleased and delighted with the specific relish of all sweets, and to distaste its contrary. Now the sugar-cane, or sugar, I hold for the top and highest standard of vegetable sweets."

From the sugar-cane a pleasant drink is made in Jamaica, as follows: Take six or seven long sugar-canes, cut them in pieces, beat them in a mortar, put them into a kettle, with about three gallons of water, boil them for a pretty while, then put as many fresh canes, and about a gallon of water more, boil them again. When it is cool, strain your drink, set it in a jar, and put to it the white of an egg, beat to froth, to which some of the liquor is added; let it work twelve hours, then bottle it. It looks very clear.

The following is an account of the exports of sugar from Jamaica, agreeable to the naval officer's returns, since the year 1790:

<i>Year</i>	<i>Hhds.</i>	<i>Tierces.</i>	<i>Barrels.</i>
1791	85,447	8037	1718
1792	85,980	7151	1242
1793	87,412	6581	829
1794	90,056	11,417	1305
1795	93,013	10,275	1292
1796 <i>There was no return.</i>			
1797	78,373	9963	753

Year

Year	Hhds	Tierces.	B. Is.
1798	87,896	11,725	1163
1799	101,457	13,538	1321
1800	96,347	13,549	1621
1801	123,251	18,704	2692
1802	129,544	45,405	2403
1803	107,387	11,825	1797
1804	103,615	12,594	2224
1805	137,906	17,977	3689
1806	133,996	18,237	3579
1807	123,175	17,344	3716
1808	121,444	15,836	2625
1809	104,457	14,586	668
1810	108,703	4560	3719
1811	127,751	15,235	3046
1812	105,283	11,357	2558

SUN FLOWER.

HELIANTHUS.

CL. 19, OR. 3.—*Syngenesia polygamia frustranea*. NAT. OR.—*Compositæ*.

This generic name is derived from two Greek words signifying sun and flower.

GEN. CHAR.—Common calyx imbricate, somewhat squarrose; compound corolla radiate, down two-leaved; receptacle chaffy, flat.

ANNUUS. ANNUAL.

All the leaves cordate, three-nerved, peduncles thickened, flowers drooping.

Root annual; stem single or branched, from five to fourteen feet in height: leaves alternate, rough, serrate, acuminate, hanging down at the end, on long petioles. Flower single, (sometimes several), nodding, a foot or more in diameter. Gerard mentions one that flowered in his garden sixteen inches in diameter, in weight three pounds two ounces. The semi-florets are of a beautiful golden colour. The seeds are numerous (Baukin mentions two thousand three hundred and sixty two in a flower), black, variegated, or white, and when they have quitted their cells, the receptacle looks like a honey-comb. The whole plant, and particularly the flower, exudes a thin pellucid odorous resin, resembling Venice turpentine. This is a very beautiful and ornamental plant in a garden, and very generally cultivated in Jamaica, where it thrives luxuriantly. Of this species there are several varieties; and two others have been introduced, the *indicus* and *tuberosos*. The seeds are eaten by poultry, and an useful oil may be extracted from them. Their uses as a food for cattle and poultry have lately been pointed out by Mr. Saunders, of Stroud, in an entertaining paper; he mentions, among other particulars, the following, which appear of the most importance: "He tried this seed as a food for swine, horses, poultry, and rabbits; all which eat it eagerly, and derive good nourishment from it. He computes that the produce from an acre would be very great, not less than from fifty to sixty sacks; and gives the following calculation on the subject:

"Every sun flower plant, allowing it the liberal space of three square feet of land to grow

grow on, will yield, at an average, a pint of seed, or five thousand grains. A grain of sun-flower seed is twice the size of a grain of wheat. A bushel of wheat, weighing sixty-two pounds, will contain six hundred and sixteen thousand grains, consequently a bushel of sun-flower seed will contain but half that number, or three hundred and eight thousand. If a single plant yields five thousand grains, sixty four will produce three hundred and twenty thousand, which is an excess of twelve thousand grains above what would be required to fill a bushel. An English acre consists of forty three thousand five hundred and sixty square feet, and allowing three feet to each plant, will therefore contain fourteen thousand five hundred and twenty plants; which, at sixty four plants to a bushel, will give 226 bushels, or fifty six sacks and a half, at four bushels to the sack; which amounts to twenty-eight quarters of seed over and above the twelve thousand grains surplus of each bushel; which for the whole acre would be nearly equal to nine sacks more, that are allowed for depredations of birds and for waste. This would be a vast product of grain considering that wheat yields but five quarters to the acre. Mr. Saunders accounts for this extraordinary produce, by stating that the sun-flower plant spreads its branches and heads in successive layers, one over another, somewhat after the manner of apple trees.

“He states also that the stalks of the plants would make good fuel, of which an acre would yield from three to nine waggon loads; and that they might be formed into hurdles for enclosing sheep.

“The leaves of the sun-flower would afford an excellent green food for cattle; rabbits eat it greedily; and there is no reason why it should not answer equally well for other animals.

“The seeds are generally sown in February or March, but some suppose that it would be better to sow them in November or December. They should be dibbled into holes three feet asunder, in rows a foot apart. When the supernumerary plants arise they should be thinned out with the hoe. It would be better to pull the plants up when ripe, than to cut them, because of their woody nature, and to prevent scattering the seed. They should be left in the field some time to dry after being pulled, and should then be bound with tarred twine, and stacked in small sheaves in the field, with the heads inclining inwards; they might afterwards, when perfectly dry, be stacked in the same manner as corn. Mr. Saunders thinks the seeds might be used as food for man, as they have a pleasant taste, like a nut, and children often are fond of them. Bees eagerly seek the flowers, and it is supposed much advantage might be obtained from the honey they would produce.”

The only objection that appears against the cultivation of the sun-flower plant, arises from the great inequality with which the heads ripen, but perhaps means might be found to diminish the inconvenience this would occasion; and the cultivation of them is at least worth a fair trial, from the many advantages of it pointed out.

SUN-FLOWER, TICKSEEDED—See TICKSEEDED SUN-FLOWER.

SUPPLE-JACK.

PAULLINIA.

CL. 8, OR. 3.—*Octandria trigynia*.

NAT. OR.—*Trihilata*.

This was so named from Simon Paulli, professor of botany at Copenhagen.

GEN.

GEN. CHAR.—Calyx a five-leaved perianth; leaflets ovate, concave, spreading, permanent; the two outer opposite, one of the inner larger: corolla four-petaled, petals ovate, oblong, twice as large as the calyx, clawed; two more distant: nectaries two; one four-petaled, inserted into the claws of the corolla; the other four glands at the base of the petals: stamens eight simple filaments, short, united at the base, with small anthers: the pistil has a turbinate germ, three-sided, blunt; styles three filiform, short, stigmas simple spreading: the pericarp a large three-sided capsule, three-celled, three valved; seeds solitary obovate. Four species of this genus are natives of Jamaica.

1. CURRASSAVICA. CURACOA.

Sarmentosa, foliis ternato-ternatis, ad apices crenatis; infimis minoribus, quandoque tantum auritis. Browne, p. 212.

Leaves biternate, all the petiolets margined, branches unarmed.

This plant is very common in the woods. It has a slender, ligneous, flexile, stalk, and generally rises to a considerable height, with the help of the neighbouring bushes. For its toughness and flexibility it is usually cut into junks, barked, and used for riding switches, and the larger pieces for walking sticks; and many are annually remitted to Great-Britain. After being kept some time they become very brittle, and apt to split, unless rubbed now and then with oil. The juice of the leaves is a great vulnerary; and the fruit, or pea, intoxicates fish.—Browne and Long.

2. PINNATA. PINNATED.

Pisum cordatum non vesicarium. Sloane, v. 1, p. 239.

Leaves pinnate, petioles margined, leaves shining; stem round, smooth, brown, rising, by the help of neighbouring trees, twenty feet; leaflets nine, placed by threes on the same common footstalk, the centre leaf of each three the largest; they are smooth, of a yellowish green colour. On the tops of the branches come out the flowers, on branched twigs, having small clavicles; the capsule is triangular, membranaceous at the edges; having three large, black, shining, almost round seeds, with a white hilus. It grows between Passage-Fort and Spanish-Town, and on the red hills, very plentifully. The fruit bruised and put into water intoxicates fish. The green leaves bruised, or their juice, is good for wounds, being vulnerary and cleansing them.—Sloane.

3. DIVARICATA. DIVARICATE.

Leaves biternate, leaflets ovate acute, mostly entire, petioles naked, panicles divaricating, wings of the capsules ovate.

4. MEXICANA. MEXICAN.

Leaves biternate, all the petioles margined, stem prickly.

This species was observed in several parts of Clarendon, by Mr. A. Robinson.

No English Name.

SURIANA.

CL. 10, OR. 4,—*Decandria pentagynia.*

NAT. OR.—*Succulenta.*

So named in honour of Joseph Donat Surian.

GEN.

GEN. CHAR.—Calyx a five-leaved perianth, leaflets lanceolate, acuminate, permanent: corolla five-petaled, petals obovate, length of the calyx, spreading; stamens ten filaments, filiform, shorter than the corolla, with simple anthers: the pistil has five roundish germs; styles solitary, filiform, erect, length of the stamens, inserted into the middle and inner side of the germ; stigmas obtuse; no pericarp; seeds five, roundish. There is only one species, a native of Jamaica.

MARITIMA. MARITIME.

Stem shrubby, a fathom high, unarmed; branches erect, subdivided, round, rugged, cicatrised with the fallen leaves, glaucous, pubescent; leaves clustered in bundles towards the ends of the branchlets, erect, wedged, bluntish, short, nerveless, veinless, thickish, villose-pubescent, pale green, on very short petioles. Peduncles terminating and axillary, shorter than the leaves, from three to five flowered; flowers small, yellow; number of stamens always five. Specimens from New Caledonia had ten stamens. This is also made *tournefortia suffruticosa*.—See *Basketwithc*, vol. 1, p. 56.

SURINAM POISON.

GALEGA.

CL. 17, OR. 4.—*Diadelphia decandria*. NAT. OR.—*Papilionaceæ*.

GEN. CHAR.—See Goat Rue, v. 1, p. 326.

TOXICARIA. INTOXICATING.

Cytisus 2. *Fruticosus erectus et villosus; foliis plurimis pinnatis, spicis florum terminalibus*. Browne, p. 296.

Spikes terminating, peduncled, legumes cylindric, pedicelled, spreading, stem and leaflets hoary, tomentose.

This is a spreading shrubby plant, and rises generally to the height of five or six feet. It was introduced from the South American continent, and is cultivated here for the sake of its qualities. The leaves and branches, being pounded and thrown into a pond, or into a river (where the current is very gentle) are stirred about, and take almost immediate effect. All the fish are presently intoxicated, and rise to the surface, where they float with their belly upwards, as if they were dead, and are easily taken. The larger ones soon recover from their trance; but great part of the smaller fry perish on these occasions. It seems therefore to be a very pernicious mode of fishing; and, indeed, is not much practised, except in the holes of the mountain rivers, which abound with excellent mullets, but are so deep, that the fish cannot well be caught by any other means.—*Browne and Long*.

—See GOAT RUE and RED BEAN TREE.

SWALLOW WORT.

ASCLEPIAS.

CL. 5, OR. 2.—*Pentandria digynia*. NAT. OR.—*Contortæ*.

GEN. CHAR.—See Bastard Ipecacuanha, vol. 1. p. 63. The following species are also natives of Jamaica.

1. GIGANTEA. GIGANTIC.

Frutescens incana, foliis majoribus subrotundis, petiolis brevissimis, floribus umbellatis. Browne, p. 182, A. 1.

Leaves ovate-oblong, petioles very short, segments of the corolla reflex, involute.

This rises six or seven feet in height, the leaves opposite, thick, downy; flowers of a dirty white colour, pods large. The nectaries do not put forth awl-shaped horns, but solid converging plates. Browne calls it auricula, or French Jasmin, common in all the savannas about Kingston and Old-Harbour; the trunk pretty much divided above the root, and the branches furnished with large roundish leaves, which seem to embrace them at their insertions, from the shortness of the pedicels, which are bearded at top. The bark of this plant is whitish and spongy, and the leaves beset with a whitish down; the flowers are disposed in umbellated groupes at the extremities of the branches, and succeeded by so many large oval follicles. This plant abounds with a milky juice, and is sometimes called French cotton. It is said to be destructive to sheep.

2. TOMENTOSA. DOWNY.

Scandens villosa major, foliis et capsulis majoribus ovatis. Browne, p. 183, A. 4.

Browne calls this the climbing asclepias, with large pods, which he found in St. Thomas in the East, generally supported by the help of neighbouring bushes, or found creeping among the rocks; the pods are smooth and oval, and seldom under two inches in the transverse diameter. It has all the appearance of the mechuacanna of Hernandez, and do not doubt its being the same.—Browne.

3. VIMINALIS. TWIGGY.

Apocynum fruticosum scandens, genista Hispanicae facie, floribus lacteis odoratis. Sloane, v. i. p. 207, t. 131, f. 1. *Funiculacea læte scandens, foliis rarioribus cordato-lanceolatis floribus umbellatis.* Browne, p. 183, A. 3.

Stem suffruticose, twining, filiform, leaves opposite, lanceolate, smooth; umbels lateral, many-flowered.

Root the size of the little finger, stem branching like the Spanish broom; the branches turn round trees and rise thirty feet high. Towards the top, at every two or three inches distance, are small two inches long twigs, set opposite, each of which has two velvety leaves also opposite, from the same joint grows the peduncle supporting six or eight flowers, umbel fashion, each of which has its particular peduncle, of a milk white colour.—Sloane. This plant rises by slender weakly stalks, and frequently spreads itself to the distance of some yards from the main root; it is furnished with very few leaves, but has a good many flowers disposed in large umbellated groupes. The whole plant is of a dark green colour, very full of milk, and common in the larger inland woods.—Browne.

See BASTARD IPECACUANHA.

SWEET BROOMWEED—See LIQUORICE.

SWEET CASSADA—See CASSADA.

SWEET

SWEET POTATOE.

CONVOLVULUS.

CL. 5, OR. 1.—*Pentandria monogynia*.NAT. OR.—*Campanaceæ*.

GEN. CHAR.—See Bindweeds, v. 1, p. 88.

BATTATAS POTATOE.

Convolvulus radice tuberosa esculenta, spinachiæ folio, flore albo, fundo purpureo, semine post singulos flores singulo. Sloane, v. 1, p. 150.
Repens floribus paucioribus, pedunculis longis alaribus, radice crasso carnosio albo. Browne, p. 154.

Leaves cordate hastate, five-nerved, stem creeping, tuber-bearing, hispid.

The root is tuberous, of various sizes; stem roundish, a little cornered, creeping to a considerable distance on the ground, and putting forth tubers, leaves, and flowers; the leaves are cordate-angular, on long petioles. The peduncles axillary, the flowers whitish purple. There are several varieties in the colour and shape of the root, some being reddish, some white, some yellow, some long, and some round, others irregularly shaped. They form a considerable article of agreeable and nourishing food in the West-Indies, and are generally cultivated in negro grounds.

The sweet potatoes rise from slips, and are cultivated by laying a few short junks of the stem, or the larger branches, in shallow trenches, with interspaces, and covering them with mould from the banks. The roots come to maturity in three or four months, and the propagation is continued by covering the stems, bits, and smaller protuberances with mould, as they dig up the more perfect roots for use. The leaves are good fodder for horses, sheep, goats, or rabbits. The roots pounded are often made into a kind of pudding, called here a *pone*, which is baked, and, with the addition of a few ring-tailed pigeons, justly esteemed a nourishing and relishing dish. Boiled, mashed, and fermented, they make a pleasant cool drink, called *mobby*; and distilled afford an excellent spirit. They will also make an excellent bread mixed with flour; for this purpose they are boiled till they begin to crack, or that the skin peels off readily; they are then peeled and bruised (while they are hot) in a mortar, till not a lump remains in them. This operation is performed in the evening before the bread is to be baked. The next operation is, to dilute them well with as much boiling water as is necessary to give them the consistence of dough. Then, after mixing them well with the leaven and flour, the whole is well kneaded together as quick as possible, and the dough covered with a cloth in a warm place till it rises. The water that is used ought to be boiling hot, or it will not answer sufficiently, and is poured upon the potatoe-mass before the flour is added. The heat of the oven is to be the same as for other bread, except that it must be rather slackened to prevent this bread from taking too much colour, and it is in the highest perfection when thoroughly baked.

The proportion of flour varies according to fancy or necessity; there must be at least one third part flour to make it eatable; but that which is made with an equal quantity, or a little more, is best. It will then be well tasted, wholesome, very nourishing, easy of digestion, and will retain its moisture many days longer than other bread; a circumstance which recommends it particularly to common use in this climate.

It might be worth the trial, whether putting a small piece of chaw-stick, viz. about one or two inches length, into the water, just before it begins to boil, might not so impregnate it with air, as to cause the dough to rise better, and render the bread much lighter; or a spoonful of water in which the stick has been infused for several hours, might be added after the boiling water is poured on.—*Long*, p. 774.

See BINDWEEDS, CHRISTMAS GAMBOL, INDIAN CREEPER, PURGING-SEA-BINDWEED,
SWEET-SOP—See SOUR-SOP.
SWEET-WILLIAM—See INDIAN CREEPER.

SWEETWOOD.

LAURUS.

CL. 9, OR. 1.—*Enneandria monogynia*.

NAT. OR.—*Holoraceae*.

GEN. CHAR.—See Avocado Pear, vol. i. p. 37.

1. BORBONIA. BOURBON.

Laurus folio longiore, flore hexapetalo racemoso, fructu humidior.
Sloane, v. 2, p. 21, t. 165. *Foliis oblongo ovatis, alternis, venosis,
racemis terminalibus, calicibus simplicibus.* Browne, p. 213.

Leaves oblong lanceolate, perennial, veined, fruits oblong, immersed in a
berried receptacle.

This tree is called *timber sweetwood*, and rises to a considerable size; the branches
are numerous. The leaves are pedicelled and grow without order, they are larger than
those of the common bay trees, being frequently seven inches long and two broad, they
are shining, hard, smooth, thin, with middle and transverse nerves; when broken
they have an agreeable smell. The flowers come out in long scattered bunches to-
wards the ends of the branches, of a white colour, with reddish peduncles: the berries
are blackish blue, having within the pulp one kernel. This tree grows in great abund-
ance in the lower hills in Jamaica, and is esteemed an excellent timberwood; its leaves
vary between oval and oblong, according to the soil and age. The wood, leaves, and
flowers have an agreeable smell. Pigeons feed upon the berries, which is thought to
give their flesh a bitter flavour.

2. LEUCOXYLON. WHITE-WOOD.

Foliis venosis ovatis, fructu majori, calicibus tumidis, laciniis reflexis.
Browne, p. 214.

Leaves oblong lanceolate, flat, perennial, racemes shorter than the leaves,
calyxes incrassated, warted.

This is called *loblolly sweetwood* or *white wood*, also common in Jamaica. The ber-
ries are as large as cherries, plump and black, and the cups pretty thick and swelling.
The leaves and tender shoots make excellent fodder for cattle.—*Browne*. The wood
is soft and unfit for building.

See AVOCADO PEAR, BAY TREES, BENJAMIN, CAMPHIRE, COGWOOD.

SWITCH SORREL.

DODONEA.

CL. 8, OR. 1.—*Octandria monogynia*.

NAT. OR.—*Dumosa?*

This was so named in honour of Rembert Dodonæus, a famous botanist of the
sixteenth century.

GEN. CHAR.—Calyx a four-leaved flat perianth; leaflets ovate, obtuse, concave, de-
ciduous; no corolla; stamens eight very short filaments; anthers oblong, bowed,
converging.

converging, length of the calyx; the pistil has a three-sided germ, length of the calyx; style cylindric three-furrowed upright; stigma slightly three-cleft, a little acute; pericarp a three-furrowed capsule, inflated, three-celled, with large membranaceous corners; seed in twos roundish. There are two species, both natives of Jamaica.

1. VISCOSA. VISCOUS.

Aceri vel paliuro affinis, angusto oblongo ligustri folio, flore tetrapetalo herbaceo. Sloane, v. 2, p. 27, t. 162. f. 3.

Leaves oblong.

This tree grows about twelve feet high, sending up from the root several stems, about the bigness of a man's leg, covered with a light brown loose bark, like uncarded hemp; the branches are upright, reddish, brown; leaves of various sizes from three to four inches long, stiff, spear-shaped, of a light green, growing with their points upright, on short footstalks; the flowers are produced at the ends of the branches, in short racemes, each on a slender footstalk about an inch long; they are of a greenish colour. Gartner describes the capsule as membranaceous, thin, netted with veins, two or three-celled, three-valved; the valves boat-shaped, the keel widened out into a membranaceous, broad, rounded, edge; partitions fastened to the axis of the fruit, which continues after the valves have fallen off; it is three-sided, and the seeds are fixed to the middle of it by two very small tubercles: seeds roundish, turgidly lenticular, but very sharp edged towards the back, hard, smooth, black. Sloane says this grows at Old-Harbour by the sea side, and on the red-hills, plentifully.

2. ANGUSTIFOLIA. NARROW-LEAVED.

Erecta fruticosa, foliis oblongis acuminatis ramulis gracilibus. Browne, p. 191, t. 18, f. 1. Triopteris l.

Leaves linear.

This resembles the foregoing, only the leaves are lanceolate linear. It is a constant inhabitant of the mountains, particularly the red-hills; some of the perianths have five leaves, and the stamens vary from six to nine. This seldom rises more than six feet, and both the trunk and branches are flexible and tapering. The taste of the whole of these plants is acerb and bitterish.

No English Name.

SYMPLOCOS.

CL. 18, OR. 4.—*Polyadelphia polyandria.* NAT. OR.—*Guaiacanæ.*

GEN. CHAR.—Calyx a one leafed bell-shaped perianth, five-cleft; corolla five or eight petals, erect at the base, spreading above; stamens very many filaments, in four rows, growing to the tube of the corolla; anthers roundish; the pistil has a superior roundish germ, a filiform style the length of the stamens, and a headed sub-trifid stigma; the pericarp a five-celled drupe; seeds many. Swartz discovered one species in Jamaica.

OCTOPETALA.

EIGHT PETAELED.

Flowers eight petaled.

No English Name.

TABERNÆMONTANA.

CL. 5, OR. 1.—*Pentandria monogynia*.NAT. OR.—*Contortæ*.

This is named in memory of James Theodore, surnamed Tabernæmontanus, who published some botanical works, and died in 1590.

GEN. CHAR.—Calyx a five-cleft acute perianth, converging, very small; corolla one-petaled, funnel form, tube cylindric, long; border five-parted, segments obtuse; nectary five glands, bifid, standing round the germ: stamens five very small filaments, from the middle of the tube, with converging anthers: the pistil has two simple germs, an awl-shaped style, and oblong headed stigma: the pericarp two follicles, horizontally reflexed, ventricose, acuminate, one-celled, one-valved; seeds numerous ovate-oblong, obtuse, wrinkled, immersed in pulp, imbricate. Three species are natives of Jamaica.

1. LAURIFOLIA. LAUREL-LEAVED.

Nerium arboreum folio latiore obtuso, flore luteo minore. Sloane, v. 2, p. 62, t. 186, f. 2. *Frutescens foliis subnitidis ovatis venosis.* Browne, p. 182.

Leaves opposite, oval, bluntish.

Stem as thick as the human leg, fifteen feet high; bark whitish, smooth; branches crooked, towards their ends grow the leaves, which are on inch long pedicels, four inches long and two broad, of a lucid green, nerved and smooth. The flowers are axillary, in clusters, peduncled, yellow, and sweet scented. The pods are forked like horns. It grew on the banks of the Rio-Cobre, under the town of St. Jago de la Vega. *Sloane.*

2. DISCOLOR. TWO-COLOURED.

Leaves opposite ovate-lanceolate; peduncles axillary, two-flowered.

This is a shrub a fathom in height, with a smooth ash-coloured bark; branches subdichotomous, spreading, round, with four-cornered smooth branchlets. Leaves entire, very slightly nerved, smooth on both sides, deep green above, pale beneath; petioles middling, angular, smooth; peduncles terminating, filiform, half an inch long; pedicels longer than the peduncles, one flowered. Flowers whitish or yellowish, small; calycine segments erect, acute; tube of the corolla half an inch long, swelling at the base and in the middle; segments at the border roundish, waved, twisted; filaments inserted into the middle of the tube; anthers ovate, within the tube; stigma headed. *Swartz.*

3. CITRIFOLIA. CITRON-LEAVED.

Leaves opposite, ovate; flowers lateral, glomerate-umbelled.

This rises with an upright woody stalk to the height of fifteen or sixteen feet, covered with smooth gray bark, abounding with milky juice, and sending out several branches from the side, which grow erect and have many joints. Leaves thick, milky, from five to six inches long, and two inches broad in the middle, drawing to a point at each end; they are of a lucid green, have many transverse veins, and stand opposite on footstalks an inch long. The flowers come out in roundish axillary branches, small, of a bright yellow colour, and have an agreeable odour; the tube of the corolla is half an inch long, the

the brim cut into five acute points, which spread open like those of common jasmine.
Martyn's Miller.

TAMARIND TREE.

TAMARINDUS.

CL. 16, OR. 1.—*Monadelphica triandria*.NAT. OR.—*Lomentaceæ*.

This name is derived from tamar, the Arabic name for the date.

GEN. CHAR.—Calyx a one-leaved perianth; tube turbinate, compressed, attenuated below, permanent, mouth oblique; border four-parted deciduous; segments ovate, acute, flattish, reflexed, coloured, the upper and lower a little wider: corolla, three petals, ovate, concave, acute, crenate, waved, reflexed, length of the calyx, inserted into the mouth of the tube; the two lateral ones a little longer: stamens three filaments, inserted into the orifice of the calyx at the void sinus, length of the corolla, awl-shaped, united below up to the middle, bowed towards the corolla: anthers ovate, incumbent, large. Threads five (rudiments of stamens); alternate with the filaments, and united below but separate above, bristle-shaped, headed, very short, the two lateral ones lower than the others: bristles two, springing from the calyx below the filaments, and incumbent on them, very small. The pistil has a germ, oblong, compressed, curved in, placed on a pedicel fastened to the bottom of the calyx, and growing longitudinally to its tube under the back, beyond the tube with the upper margin villose; style awl-shaped, ascending, pubescent on the lower margin, a little longer than the stamens; stigma thickened obtuse: the pericarp is an oblong legume, compressed, blunt with a point, swelling at the seeds, covered with a double rind, the outer dry and brittle, the inner membranaceous, a soft pulp between both; one-celled, not opening: Seeds few, angular roundish, plano-compressed, shining, hard. There is only one species.

INDICA. INDIAN.

Diffusus foliolis pinnatis pinnis distichis alternis. Browne, p. 125.

Tamarindus. Sloane, v. 2, p. 45.

This tree is a native of both Indies, where it grows to a very large size, the stem covered with a brown bark, and dividing into many branches, which spread wide in every direction, with a very thick and beautiful foliage. The leaves are pinnate, composed of sixteen or eighteen pairs of leaflets, without a single one at the end (Houreiro says they sometimes have one), they are ovate-oblong, quite entire, smooth, sessile, of a bright green, spreading during the day, but closing, so as to lie over each other in the night; they have an acid taste. The flowers come out from the sides of the branches, on a long upright common peduncle, six or more together, in loose bunches: corolla yellow, with red veins; the three petals ovate-lanceolate, unequal, spreading. Partial peduncles half an inch long, with a joint, by which the flower turns inwards. The pods are thick and compressed, from two to five inches in length, with two, three, or four, seeds. Swartz describes the calyx as four-leaved; the three petals unequal, spreading, deciduous, with a void cleft as it were for two others; the two upper ones the length of the calyx, ovate, acute, and channelled at the base, the middle one smaller and cowed; three fertile filaments and seven very short barren ones; anthers oblong,

oblong, versatile : germ sabre-shaped, bowed, three-cornered ; legume one-celled, containing from three to six seeds. Linneus placed this tree in the class triandria, but later botanists have more properly assigned it that of monadelphia. The timber of the tamarind, although it is a tree of quick growth, is heavy, firm, and hard, and may be converted into many useful parts of building. The fruit is used both in food and medicine ; the pulp is connected to the seeds by numerous tough strings : as a medicine, Dr. Cullen was of opinion that it is best preserved in the pods. The use of this fruit was first learned from the Arabians, it contains a larger proportion of acid with saccharine matter, than is usually found in the acid dulcet fruits, and is therefore not only employed as a laxative, but also for abating thirst and heat in various inflammatory complaints, and for correcting putrid disorders, especially those of a bilious kind ; in which the cathartic, antiseptic, and refrigerant qualities of the fruit have been found equally useful. When intended merely as a laxative it may be of advantage to join it with manna, or purgatives of a sweet kind, by which its use is rendered safer and more effectual. Three drachms of the pulp are usually sufficient to open the body ; but, to prove moderately cathartic, one or two ounces are required. The leaves are sometimes used in sub-acid infusions ; and, Alpinus says, a decoction of them kills the worms in children. The fruit is frequently made an ingredient in punch, and seldom fails to open the body ; mixed with a decoction of borrago it is reputed excellent in allaying heat of urine, proceeding from a venereal cause. A good vinegar may be made from the fruit ; a very agreeable cooling drink is made by simply mixing water with a few spoonfuls of it when preserved.

This tree is exceedingly common in Jamaica, grows to a vast bulk, and thrives well in the savanna lands, but best in deep, rich, brick, mould.

The fruit, or pods, are gathered in June, July, and August, attaining sooner to maturity in some parts than in others. The usual method of preparing the fruit for exportation is as follows : The pods are gathered when full ripe, which is known by their fragility, or easy breaking on a small pressure, between the finger and thumb. The fruit taken out of the pod, and cleared from the shelly fragments, is placed in layers, in a cask, and the boiling syrup from the *teache* or first copper in the boiling house, just before it begins to granulate, is poured in, till the cask is filled ; the syrup pervades every part quite to the bottom, and, when cool, the cask is headed for sale. The more elegant method is, with sugar well clarified with eggs, till a clear transparent syrup is formed, which gives the fruit a much pleasanter flavour.

The East-India tamarind differs not from that of the West-Indies, but the pulp of the fruit is preserved without sugar, and exported to Europe in this form, which is better adapted for an ingredient in medicinal compositions.

The duty payable in Great-Britain upon the sugar preserved tamarind is so high, that it cannot answer as a remittance ; but, if sent as a drug, that is, the pulp carefully separated from the seeds, put in jars and well covered from the air by a covering of oiled paper, and waxed cloth, it might be a profitable article of remittance. The pulp would possibly be better secured from mouldiness, by giving it a gentle heat in an oven, by which the cruder parts may be evaporated, and the virtue of what remains not in the least diminished.—*Long*, p. 729.

A better mode than the usual of preparing preserved tamarinds is to put alternate layers of tamarinds and powdered sugar in a stone jar ; by this means the tamarinds preserve their colour and taste more agreeably. The seeds too, of tamarinds thus prepared,

pared, will vegetate easily; and this method conveys a hint for sending succulent berries and seeds in tamarinds from abroad. Dr. Zimmerman prescribes tamarinds in putrid dysentery. I commonly add a portion of Epsom salts till stools are procured; afterwards tamarinds alone till the disorder is cured. In obstinate dysenteries I have often found five grains of calomel act like a charm, whether the disorder was kept up by bilious obstructions or worms.—*Wright.*

TAMARIND, WILD—*See WILD TAMARIND.*

TANSEY.

TANACETUM.

CL. 19, OR. 2.—*Syngenesia polygamia superflua.* NAT. OR.—*Compositæ.*

GEN. CHAR.—Common calyx imbricate, hemispherical; rays of the corolla obsolete, trifid, (sometimes none, and all the florets hermaphrodite). Down, submarginate; receptacle naked.

VULGARE. COMMON.

Leaves bipinnatifid, gash-serrate, naked.

This plant is a native of Europe, but thrives very well in most parts of Jamaica. It has a fibrous creeping root, and spreads to a considerable distance. Leaves alternate, deep green; pinnules lanceolate deeply and acutely serrate. The flowers are in terminating corymbs and of a golden colour, and flattish. This herb has a bitter taste and aromatic smell. It is esteemed of use in warming and strengthening the stomach; for which reason the young leaves have obtained a place among the culinary herbs, their juice being an ingredient in puddings, &c. It is rarely used in medicine though extolled as a good emmenagogue, anthelmintic, and resolvent. A drachm of the dried flowers has been found very beneficial in hysteric disorders arising from suppression. The seeds and leaves were in considerable esteem for destroying worms in children, and are reckoned good in cholics and flatulencies. In some parts of Sweden and Lapland a bath with a decoction of this plant is made use of to assist parturition. Cows and sheep eat it; horses, goats, and swine, refuse it. If dead animal substance be rubbed with this plant, the flesh fly will not attack it. The common way of using it as a medicine is in decoction, drank as tea. An essential oil is extracted from this plant.

TANSEY, WILD—*See LAVENIA and WILD TANSEY.*

TAYO—*See COCOES.*

No English Name.

TERAMNUS.

CL. 17, OR. 4.—*Diadelphia decandria.* NAT. OR.—*Papilionaceæ.*

GEN. CHAR.—Calyx a one-leaved perianth, two-lipped; upper lip a little larger, bifid; lower three-toothed, teeth acute, erect, approximating; corolla papilionaceous; standard obcordate, spreading, erect, bent down a little; wings length of the standard, erect, approximating, rounded at the top; keel very small, concealed.

cealed at the base by the calyx between the lower part of the wings, bipartite, covering the stamens: stamens ten filaments, five very small and barren, alternate with the others, which are fertile, longer, and united at the base; anthers roundish: the pistil has an elongated germ, pubescent; no style; stigma round headed: the pericarp a linear, compressed, margined, legume; seeds many, roundish, compressed, retuse at the end. There are two species, both natives of Jamaica.

1. VOLUBILIS.

TWINING.

Phaseolus sylvestris minor, flore minimo, siliquis longis, teretibus, alba lanugine hirsutis. Sloane, v. 1, p. 182. *Triphyllus subhirsutus, foliis oblongo ovatis, siliquis gracilibus compressis, spicis laxioribus alaribus.* Browne, p. 290.

Leaves ovate-lanceolate pubescent.

This has several hairy small stems, by which it twines round every thing it comes near, running six or seven feet. The leaves are about an inch and a half distant, always three together, oblong, and moderately covered with down, the middle one the largest. The flowers are small and disposed in slender spikes at the axils of the leaves, they are of a greenish colour and so small as to be scarce discernible. The seed vessels are long, slender, woolly, and compressed, containing yellowish seeds, with a white eye. This plant is frequent in the lower hills of Jamaica; and was removed from the genus dolichos, because it wanted the calusses at the base of the standard, and differs in other respects.

2. URCINATUS.

CROOKED.

Leaves oblong, obtuse, silky beneath.—Sw.

No English Name.

TERNSTROEMIA.

CL. 13, OR. 1.—*Polyandria monogynia.*

NAT. OR.—*Columnifera.*

This was so named in memory of Ternstroem, known by his travels into China.

GEN. CHAR.—Calyx a one-leaved five-parted perianth, upon which two smaller scales are incumbent; all the segments are orbicular, concave, and permanent: corolla one-petaled, bell-shaped; no tube; border five-parted; segments orbicular, concave, emarginate, longer than the calyx: stamens numerous filiform filaments, inserted in a double row into the base of the corolla, and shorter than it; anthers linear, erect, length of the filaments; the pistil has a superior roundish germ; a cylindric style the length of the stamens, and a capitate stigma: the pericarp a juiceless ovate berry, even, two-celled: seeds about eight, convex on one side, flat on the other. One species is a native of Jamaica.

MERIDIONALIS.

MERIDIAN.

Leaves ob-ovate, emarginate, quite entire, peduncles axillary.

This is a tree with determinate branches, and more simple stiffish branchlets, with an ash-coloured bark; leaves alternate, sub-petioled, coriaceous, perennial, oval, obtuse, subemarginate, somewhat recurved at the edge, quite entire, veinless: no stipules.

Peduncles

Peduncles thick, compressed-ancipital, shorter by half than the leaves, drooping : calyx rigid, almost cartilaginous ; corolla mostly five-parted, seldom six-parted, whitish below, yellowish above, first globular then bell-shaped : berry dry, falling when ripe without splitting ; seeds scarlet, silky.

THATCH TREE—See PALMETO.

THORN APPLE.

DATURA.

CL. 5, OR. 1.—*Pentandria monogynia*.

NAT. OR.—*Luride*.

GEN. CHAR.—Calyx an oblong perianth, tubulated, of a pentangular figure, monopetalous, divided into five segments at the extremity ; its upper part falls off near the base ; but an orbicular segment of it remains on the plant. The corolla is funnel-shaped, monopetalous, the limb folded in five places and almost entire at the edges, but rising into five points ; stamina the length of the cup, with oblong anthers ; germen oval ; style filiform ; stigma thick, obtuse, and bilamellated. Capsule four-valved two-celled, and affixed to the base of the cup : the receptacles are convex, large, punctated, and affixed to a partition : the seeds are numerous and kidney-shaped.

STRAMONIUM.

Stramonia altera major sive tatura quibusdam. Sloane, v. 1, p. 159.

Foliis profunde crenatis, fructu erecto spinoso. Browne, p. 167.

Pericarps thorny, erect, ovate ; leaves ovate smooth.

This plant, in every respect the same as the European, grows very commonly in every part of Jamaica, rising a yard high, with an erect, strong, round, hollow, green, stalk, branching luxuriantly, having the branches widely extended on every side ; large, oval, irregularly angulated, smooth, dark green leaves ; and, from the divisions of the branches, large white flowers singly, succeeded by large oval prickly capsules, growing erect, commonly called thorn-apples. At night the upper leaves rise up and inclose the flowers. The blossoms have sometimes a tinge of purple or violet. The flowers consist of one large funnel-shaped petal, having a long tube, and spreading pentagonal limb, succeeded by large roundish capsules, of the size of middling apples, closely beset with sharp spines. An ointment prepared from the juice of the leaves and hogslard, gives ease in external inflammations, burns, and in the hæmorrhoids, as in virulent ulcers. The seeds were lately recommended by Dr. Storck to be taken internally in cases of madness ; but they seem to be a very unsafe remedy. Taken even in a small dose, they bring on a delirium, and in a large one would certainly prove fatal. Cows, horses, sheep, and goats, refuse to eat it.

The Edinburgh college direct an extract from the leaves, which has been given with great advantage in convulsions and epilepsies ; the dose from two to sixteen grains a day. These and the seeds given internally bring on delirium, tremors, swelling, itching, eruption and inflammation on the skin. Browne says all its parts are remarkably narcotic, though seldom administered inwardly, on account of those dreadful perturbations of mind that generally attend the taking of it. Externally applied as an ointment, the juice and seeds are useful in scalds and painful sores.

In the Jamaica Medical Assistant it is noticed, that Dr. Hufeland, in his account of small-pox, says he has found the tincture of the seeds of the thorn-apple a narcotic remedy superior to laudanum, and that he has cured by it many obstinate complaints of the mental and convulsive kind. An ointment prepared from the leaves gives ease in hæmorrhoids or piles. Could the extract be substituted for that of hemlock, which is not to be kept good long in this climate? An extract is directed by the Edinburgh college, which is given in convulsions and epilepsies. An extract may be made by boiling any quantity of the bruised seeds in water, then evaporating the strained liquor, &c. Dose— $\frac{1}{2}$ gr. to 1 gr. This extract given in small doses, is cooling, diuretic, and anodyne; it renders the pulse slower; in large doses it occasions a loss of vision and speech, palsey, &c.—*See Dr. King, Med. and Phys. Jour.*

In the Monthly Magazine, for June, 1810, a case of severe spasmodic asthma is related, which was cured by smoking the root of this plant; after every other remedy had been tried in vain. The writer, who signs *Verax*, describes his case as follows: "His complaint was brought on by free living, the asthmatic paroxysm usually came on about two o'clock in the morning, when I was suddenly surprised from sleep with violent convulsive heavings of the chest; and I was scarcely allowed time to place myself upright in a chair, where I sat resting myself upon my elbows, and with my feet upon the ground (for I could not bear them in an horizontal posture) before I underwent a sense as it were of immediate suffocation. The fits generally continued, with short intermissions, from thirty-six hours to three days and nights successively; during which time, I have often, in the seeming agonies of death, given myself over, and even wished for that termination of my miseries. I consulted the most eminent physicians in vain. An amiable friend and most respectable surgeon at Hackney, first persuaded me to smoke the divine *stramonium*, to which I owe altogether my present freedom from pain, and renewed capacity of enjoyment. It is the root only and lower part of the stem of this plant, which seem to possess its anti-asthmatic virtue; these should be cut into small pieces, and put into a common tobacco pipe, and the smoke must be swallowed, together with the saliva produced by the smoke; after which the sufferer will in a few minutes be relieved from all convulsive heavings, and probably drop into a comfortable sleep, from which he will awake refreshed, and in general perfectly recovered: at least this is the invariable effect produced upon myself. He should by all means avoid drinking with the pipe. A dish of coffee I always take after it, and find it highly refreshing. I have taken a dozen pipes at a time, without experiencing from them any other inconvenience than a slight excoriation or soreness of the tongue. This has preserved me from the visitation of asthmatic horrors, after having been subject to periodical attacks for several years; and I have now enjoyed a perfect state of freedom from this species of misery for many months." From another letter from the same writer, which appears in the Monthly Magazine for January, 1811, it is stated that the *stramonium* was in such repute for asthmatic cases, as to be sold for 1*l.* 4*s.* per *lb.* In this letter he mentions that the herb should be dried gradually, the mould brushed off the roots, which are afterwards cut into small pieces, and put into a common tobacco pipe; the smoke to be forced into the stomach by swallowing. He adds that the stalk is equally efficacious with the root.

There are three sorts of this plant. One hath a very white flower. Of this sort I saw growing in a garden in Colchester, above forty years ago: the surgeon who had it made both salves and ointments of it, the use of which gained him much credit; and there

there is an account in Gerard, of a gentlewoman in Colchester, who was so burnt with lightning as to be thought past all relief, but was cured by an ointment made of the leaves of this plant. I have known it experimentally cure contracted tendons or nerves, by chaffing or rubbing in the ointment hot into the part affected. It hath a thin green stinking leaf, smelling almost like opium, and much indented; it branches and spreads like a little tree; the stalks are of a pale-green; it hath a long tubical white flower, after which comes its fruit, which is oblong, and in shape and bigness of a walnut with its green shell, set full of soft prickles while green, but when dry are able to penetrate into the flesh; these contain a vast quantity of small black seeds, like the *papaver spinosum*, and of a stupifying quality. I know a gentleman at this present time, that, whenever he hath a fit of the gout, applies these leaves to the part, and it gives ease in about three hours. The leaves, applied to the head, ease pain and cause rest.—*Barham*, p. 192.

THREE HEART'S SHRUB—See WOOD SORREL.

THREE-HORNED SHRUB.

TRICERA.

CL. 21, OR. 4.—*Monoecia tetrandria*.

NAT. OR.—*Tricoccæ*.

This is so named from its three-horned capsule.

GEN. CHAR.—Male calyx a one-leaved perianth, four-parted to the base; segments lanceolate, acute, erect, permanent, coloured: no corolla: stamens four erect filaments, longer than the calyx, ovate, anthers sitting on the top of the filaments, lanceolate, acute, channelled in the middle, after flowering recurved. Female calyx a five-leaved perianth; leaflets ovate, acute, erect, coloured: no corolla: the pistil has a sub-trigonal germ; three short styles, roundish, conical, after flowering bipartite; stigmas longer than the styles, recurved, patulous, channelled, permanent; the pericarp an oblong trigonal capsule, three horned, three-celled, three-valved: seeds in pairs, oblong, obtuse. There is only one species, which is a native of Jamaica; the *crantzia lævigato* of Swartz.

LAEVIGATO. SMOOTH.

This is a branching shrub, two or three feet high; branches almost simple, long, spreading, four-cornered, leafy, even: leaves on short round petioles, opposite, distich, ovate-lanceolate, acute, convex, quite entire, veined above, marked with lines at the edge, veinless beneath, stiffish, very smooth. Flowers in simple, axillary, opposite, umbels; the common peduncle four-cornered, three times shorter than the leaves. Of the males there are from four to eight opposite pedicels, approximating in form of an umbel, a quarter of an inch long, one-flowered, deciduous. There are two very small whitish bracts at the base and in the middle of the pedicels. Female flower larger, styles three, sometimes, but rarely, four; capsule of the size of a large pea, the valves bursting with a spring; seeds black, shining, girt with a membranaceous white aril. Native of Jamaica in mountain coppices in the western parts, flowering in the spring months. This genus should be placed between *ciacca* and *buxus*: It is very nearly allied to the latter; but differs in having no corolla, in the form of the filaments and stigmas, and in the aril of the seed; also in its peculiar inflorescence.—*Sw.*

THYME.

THYME.

THYMUS.

CL. 14, OR. 1.—*Didynamia gymnospermia*. NAT. OR.—*Verticillatae*.

This name is derived from a Greek word signifying courage, strength, being supposed to revive the spirits.

GEN. CHAR.—Calyx a one-leafed perianth, tubular, half five-cleft into two lips, permanent, having the throat closed with villose hairs; upper lip wider, three-toothed, lower lip two-bristled: corolla one-petaled, ringent; stamens curved in, anthers small; the pistil has a four-parted germ, a filiform style, and a bifid acute stigma: no pericarp: calyx narrowed at the neck, cherishing the seeds in its bosom; seeds four, small, roundish.

1. VULGARIS. COMMON.

Flowers wheel spiked, stems erect, leaves ovate, rolled back.

This well known and useful plant is a native of Europe, but thrives very well in Jamaica, and is cultivated in every garden. It has an agreeable aromatic smell, and a warm pungent taste; its qualities are said to be emmenagogue, diuretic, tonic, and stomachic. It yields a species of camphor in distillation with water. Its culinary uses are many.

2. BROWNEI. BROWNE'S.

Minimus herbaceous, foliis orbiculatis crenatis, floribus singularibus ad alas. Browne, p. 259.

Leaves orbicular crenate, flowers peduncled axillary. This little herbaceous plant is a native of Jamaica, and grows wild in many parts of the island. I met with it in plenty at the Decoy, in St Mary's. The flowers are solitary, acute, on a very short peduncle: upper lip of the corolla slightly bifid, erect; middle segment of the lower larger, cordate.—*Browne*.

TICKSEEDED-SUN-FLOWER.

COREOPSIS.

CL. 19, OR. 3.—*Syngenesia polygamia frustranea*. NAT. OR.—*Compositae*.

This generic name is derived from two Greek words for tick-like, on account of the appearance of the seeds.

GEN. CHAR.—Calyx erect, composed of many leaves, surrounded at the base with spreading rays: corolla compound rayed; there is no pericarp, the calyx scarcely altered: down two-horned: receptacle chaffy: two species are natives of Jamaica.

1. ALBA. WHITE.

Scandens; foliis serratis, ternato-pinnatis, receptaculo nudo. Browne, C. 3, p. 321.

Browne calls this the climbing coreopsis, a native of the hills. The florets of the margin are all neuter, and rise immediately from the bottom of the inward scales: the seeds are bident.

2. REPTANS.

2. REPTANS. CREEPING.

Chrysanthemum trifoliatum scandens, flore luteo, semine longo, rostrato bidente. Sloane, v. 1, p. 261, t. 154, f. 2, 3.

Leaves serrate ovate, upper ones ternate; stem creeping.

Root small fibrous; stem climbing, weak, five feet high, branching leafy; leaves pedicelled, always three together, serrated, smooth, green, thin, the middle one the largest; peduncles from the axils of the top leaves, terminating, erect, round, striated, hairy, single flowered; there are sometimes two or three lanceolate entire bractes at the base of the peduncles; the flowers are yellow, crowded close together. It grows commonly in Jamaica.

TIGER'S FOOT—See BINDWEEDS and INDIAN CREEPER.

TOBACCO.

NICOTIANA.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT. OR.—*Luridae.*

The English name is derived from the island Tobago, the generic name, from Jean Nicot, of France, who first sent its seeds there.

GEN. CHAR.—Calyx a one-leafed ovate perianth, half five-cleft, permanent; corolla one-petaled, funnel form; tube longer than the calyx; border somewhat spreading, half five-cleft, in five folds; stamens five awl shaped filaments, almost the length of the corolla, ascending; anthers oblong: the pistil has an ovate germ, a filiform style, the length of the corolla, and a capitate emarginate stigma: pericarp a subovate capsule, marked with a line on each side, two-valved, opening at top; receptacles half ovate, dotted, fastened to the partition; seeds numerous, kidney-form, wrinkled.

TABACUM. TOBACCO.

Nicotiana major latifolia. Sloane, v. 1, p. 146. *Foliis amplis, oblongo-ovatis, floribus comosis.* Browne, p. 167.

Leaves lanceolate ovate, sessile, decurrent, flowers acute.

Root large and long; stem rising from six to nine feet, upright, round, hairy, clammy, frequently an inch in diameter, branching towards the top: the leaves numerous, large, pointed, entire, alternate, veined, viscid, pale green, large, (sometimes twenty inches long), decreasing in size towards the top, where they are not half the size of the lower ones; they are much corrugated on the surface when at maturity, but smoother when young: the bractes are long and linear. The stem and branches are terminated by loose clusters of flowers in panicles, of a whitish red colour, the edges when full blown inclining to purple: they are succeeded by the capsule and numerous small ovate, sub-reniform seeds, in a large receptacle, they have raised lines and nerves, which are beautifully netted, of a yellowish bay colour. These seeds are extremely small, and it has been calculated that each capsule contains one thousand, and the whole produce of a single plant three hundred and fifty thousand.

Tobacco was first discovered in America by the Spaniards, about the year 1560, and by

by them imported into Europe. It had been used by the inhabitants of America long before; and was called by those of the islands *yoli*, and *petun* by the inhabitants of the continent. Sir Walter Raleigh is generally said to have been the first that introduced it into England, about the year 1585, and who taught his countrymen how to smoke it. It was carried to France by one Nicotius, who got it at Lisbon about the year 1560.

There are two varieties of the tabacum, which are distinguished by the names of *oronokoe* and *sweet-scented* tobacco. They differ from each other only in the figure of their leaves; those of the former being longer and narrower than the latter.

The following extract, which is copied from a manuscript of Dr. Barham, for directing the raising, cultivating, and curing, tobacco in Jamaica, (which is not printed with the rest of Barham's MSS.), is perhaps worthy the attention of those who wish to be further acquainted with this subject:

"Let the ground or woodland wherein you intend planting tobacco be well burned, as the greater the quantity of wood-ashes the better. The spot you intend raising your plants on must be well strewed with ashes, and laid smooth and light; then blow the seed from the palm of your hand gently on the bed, and cover it over with palm or plantane leaves.

"When your plants are about four inches high, draw them, and plant them out about three feet asunder; and, when they become as high as your knee, cut or pluck off the top; and if there are more than twelve leaves on the plant, take off the overplus, and leave the rest entire. The plant should now be daily attended to, in order to destroy the caterpillars that are liable to infest it; as also to take off every sprout or sucker that puts out at the joints, in order to throw the whole vegetable nourishment into the larger leaves.

"When the edges and points of the leaves begin to turn a little yellow, cut down the stalks about ten o'clock in the morning, taking the opportunity of a fine day, and be careful the dew is fully off the plant, and do not continue this work after two in the afternoon. As fast as it is cut let it be carried into your tobacco house, which must be so close as to shut out all air, (on this much depends) and hung up on lines, tied across, for the purpose of drying.

"When the stalks begin to turn brownish, take them off the lines, and put them in a large binn, and lay on them heavy weights for twelve days; then take them out, and strip off the leaves, and put them again into the binn, and let them be well pressed, and so as no air gains admission for a month. Take them out; tie them in bundles, about sixty leaves in each, which are called *monocoës*, and are ready for sale. But observe to let them always be kept close till you have occasion to dispose of them.

"Let your curing house be well built, and very close and warm: if a boarded building, it will not be amiss, in a wet situation, to cover the whole outside with thatch and plantain trash, to keep off the damps; for by this care you preserve the fine volatile oil in the leaves. Observe, no smoke is to be made use of or admitted into your curing house."

Since the introduction of tobacco into Europe (1560) various medical properties have been ascribed to it, but of late years it has been spoken of by the generality of medical writers in such a manner as has almost occasioned its dismissal from modern practice, at least from internal use: but this circumstance has not deterred Dr. Fowler, a physician of eminence in Staffordshire, from commencing an enquiry into its medical effects; and he has given the result of his experiments, which seem to be accurately and faithfully related.

That

That tobacco, under proper regulations, may be administered internally, not only as a safe but an efficacious remedy, especially as a diuretic in cases of dropsy and dysury, seems certain enough. This property, amongst the vast number that have been attributed to it, however, seems scarcely ever to have been hinted at. The forms in which Dr. Fowler ordered it were in infusion, tincture, or pills.

Infusion. Take of tobacco leaves dried an ounce, boiling water one pound; infuse them for an hour in a close vessel set in a warm place, and steam off about fourteen ounces. Then add two ounces of rectified spirit of wine.

Tincture. Take of dried tobacco leaves an ounce, of rectified spirits, Spanish white wine, or vinegar, one pint; to be infused for four days.

Pills. Take of dried tobacco leaves in powder, one drachm, of the conserve of roses enough to make it in a mass; which is to be divided into sixty pills.

Of the infusion or tincture, Dr. Fowler gives from six to one hundred drops twice-a-day in water, or in a cordial julep, or other proper vehicle, sufficient to produce the effect in adults; but in irritable habits he seldom exceeded twenty-five drops. To a patient of ten years old he gave fifty drops; to a child of five years old twenty drops; but to patients under five years old he never ventured to prescribe it.

The first effects of the infusion is a transient heat in the stomach and throat, as if the patient had taken a dram. The next general effect in a moderate dose is diuretic, with or without a slight vertigo and giddiness, and frequently nausea. In painful cases, it proves anodyne, and in some cases occasions drowsiness and sleep; in others drowsiness, with a sense of heat and restlessness.

Dr. Fowler gave this medicine in one hundred and fifteen cases: in ninety-three of which it proved diuretic; in forty of these cases, it occasioned purging; seventy-nine of these patients complained of vertigo. In fifty-two of the number it excited nausea; in the two last cases he directs the medicine to be suspended, and the doses lessened. Dr. Fowler tried it in thirty cases of dropsy, viz four of anascara, or general dropsy; two of ascites; and twelve of dropsical swellings of the legs, were all cured. In ten other cases it afforded considerable relief; and in three cases only it was of no use. In ten instances of dysury the infusion was anodyne and diuretic, thereby abating pain, relaxing the urinary passages, and promoting urine. In dysuries from gravel, it facilitates the expulsion of calcareous or gritty matter.

Dr. Fowler speaks of the use of tobacco in injections; an ounce of the infusion in a pint of water gruel at a time, and repeated in cases of obstinate constipation, as the case may require. In the dry belly-ache, in the West-Indies, injections of the smoke of tobacco have long been employed with the happiest effects.

After all, the internal use of tobacco should be very limited, and can only be safe in the hands of a skillful and attentive practitioner. Tobacco is often used externally in unguents for destroying cutaneous insects, cleansing old ulcers, &c.; and is generally and successfully used for cleansing and destroying vermin in the sores of cattle and horses. Beaten into a mash, with vinegar or brandy, it has also sometimes proved serviceable for removing hard tumours of the hypochondries: an account is given in the Edinburgh essays of two cases of this kind cured by it. The most common uses of this plant, however, are either as a sternutatory when taken by way of snuff: as a masticatory, by chewing it in the mouth; or as effluvia, by smoking it; and, when taken in moderation, it is not an unhealthful amusement. The ashes are said to be an excellent dentrifice, and corrective of a putrid disposition in the gums. The leaves chopped up in corn and given to horses, bring off botts.

TOMATO BERRIES, or LOVE APPLES.

SOLANUM.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Luridæ*.

GEN. CHAR.—See Calalu, branched, vol. 1, p. 141.

LYCOPERSICON.

Subhirsutum, foliis varie incisus interrupte et abrupte pennatis, calibus septem-partitis. Browne, p. 175.

Stem unarmed, herbaceous; leaves pinnate-gashed, racemes two-parted, leafless, fruits smooth.

This has an herbaceous branching, hairy stem, creeping on the ground for six or eight feet. Leaves pinnate, of a rank smell, composed of four or five pairs of leaflets, terminated by an odd one, cut on their edges, and ending in acute points. The flowers are axillary on simple racemes of long peduncles, sustaining several yellow flowers. The berry, smooth, shining, soft, of a yellowish or reddish colour, varying in size and shape. It is much used boiled in soups and sauces, to which it imparts an agreeable acid flavour; or served up boiled or roasted; they are also fried with eggs. Barham calls them love apples, and speaks of them as follows: "So called by the Spaniards, who use them in their sauces and gravies; because the juice, as they say, is as good as any gravy, and so by its richness warms the blood. The fruit of the wild sort is no bigger than a cherry; but those that grow in gardens are as big as a small apple, very round and red, and therefore called *pomum amoris*; some call them *tomatoes*. It hath a small sharp-pointed jagged leaf, growing very thick upon its stalk and branches; its fruit is round and red, or of an orange colour. I have eat five or six raw at a time: They are full of a pulpy juice, and of small seeds, which you swallow with the pulp, and have something of a gravy taste. Its juice is cooling, and very proper for defluxions of hot humours in the eyes, which may occasion a *glaucoma*, if not prevented; it is also good in the St. Anthony's fire, and all inflammations; the fruit, boiled in oil, is good for the itch; and a cataplasm of them is very proper for burns."

See CALALUE, Branched, EGG-PLANT, NIGHTSHADES, POTATOES, TURKEY-BERRIES.

TOOTH, or LEAD WORT.

PLUMBAGO.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Plumbagines*.

GEN. CHAR.—Calyx a one-leafed perianth, five-cornered; corolla one-petaled, funnel form; nectary five-valves; stamens inserted into the scales enclosing the base of the corolla; anthers small: the pistil has an ovate germ, a simple style, and a five-cleft stigma: pericarp an oblong capsule; seed single, oblong, tunicated. One species is a native of Jamaica.

SCANDENS. CLIMBING.

Dentellaria lychnioides sylvatica scandens flore albo. Sloane, v. 1, p. 211, t. 133, f. 1. *Spicis ramosis terminalibus, petiolis brevibus, flore albo.* Browne, p. 158.

Leaves petioled, ovate, smooth; stem flexuose-scandent.

Stem suffrutescent, scandent, sometimes decumbent, loose, flexuose, branched, round.

round, striated, smooth; leaves alternate, ovate-lanceolate, acuminate, nerved, spreading, entire, smooth on both sides; two smaller leaflets at the base of the middle, and two above it: petioles very short, compressed, channelled, half-embracing, membranaceous at the edge, with a red spot at the base underneath. Flowers terminating, sub-panicled, commonly in spikes, sessile, scattered, approximating; leaflets sessile under the flowers; calyx inferior, bellying in the middle, and towards the base five-grooved, with glanduliferous hairs; border of the corolla five-parted; parts roundish, emarginate, with a very short point in the middle; nectaries roundish, yellow, round the germ, inserted into the bottom of the calyx: filaments thickened, approximating, awl-shaped; anthers placed on the top of the filaments, blue; style the length of the stamens; seed coated, as it were included in a capsule, and covered with the permanent calyx. Native of Jamaica, in dry hedges.—Swartz. Sloane says it grew plentifully on both sides the road to Passage-Fort. Barham calls it tooth-wort, and says it is so called from the form and colour of the root, which is very white, and is composed, as it were, of a great many teeth. We have a sort of it growing in America; some will have it to be a sort of lead-wort. This plant hath a viscous green calyx, in which is a white pentapetalous flower, like the *lychnis sylvestris flore albo*, with a rough viscid capsula, which catches flies. This plant is not a true climber, and yet it cannot support itself, it generally growing amongst shrubs. It is counted a cooling, drying, and restringent plant, therefore good in ruptures, and a good vulnerary herb for wounds: Some make it to have the properties of wild campions, others of lung-wort. Browne says it is of an acid corrosive nature.

TORCH THISTLE.

CACTUS.

CL. 12, OR. 1.—*Icosandria monogynia*. NAT. OR.—*Succulentæ*.

GEN. CHAR.—See Indian Fig, vol. 1, p. 408. There are two species of this genus called torch-thistle or dildoes, the repandus and the peruvianus; the third species described under this article was not known to be in Jamaica when the accounts of the other species of Cactus referred to were published, and is therefore here introduced.

1. REPANDUS. REPAND.

Cereus crassissimus, fructu intus et extus rubro. Sloane, v. 2, p. 157. *Erectus cylindraceus erectus sulcatus tenuior, summitate attenuatus; aculeis confertis*. Browne, p. 238, C. 9.

Erect, long, eight-angled; angles compressed, waved; spines longer than the wool.

The roots of this tree, when young, are spread on the surface of the ground, for several feet distance, solid, of a chesnut colour. The stem is upright, twenty feet high, jointed at every two or three feet, and about sixteen inches in circumference; channelled on the sides with eight, nine, or ten, deep furrows, which are armed at their angles with tufts of white prickles, in a star-like form: it is hollow, full of a fibrous green thick pulp. The branches proceed from the joints, and again produce other branches, or leaves. The flowers grow from the angles towards the top, having a thick, fleshy, scaly, round, channelled, hairy peduncle, supporting a swelling germ, upon the top of which sits the scaly prickly calyx, closely surrounding the corolla, till a little time before it expands; the petals are long and white. The fruit is about the size of a bergamot pear, having many soft spines on the skin, sticking close to the stem, the out-

side pale yellow; when ripe of a reddish colour; the skin is thin, containing a red sweet pulp, and a great many small, black, shining, crackling, seeds. This fruit is eaten and thought of a cooling nature; Sloane says that wood-ants are extremely fond of it, and that beaten and applied it is a good vulnerary.

2. PERUVIANUS. PERUVIAN.

Cereus altissimus gracilior fructu extus luteo, intus niveo, seminibus nigris pleno. Sloane, v. 2, p. 158. *Cylindraceus erectus sulcatus major, summitate obtusus; aculeis confertis.* Browne, p. 238, C. 8.

Erect, long, with about ten bluntnish angles.

The stem a fathom or more in height, almost simple, two or three inches in diameter, blunt at the end, having ten deep angles, set with thorns, crowded eight or ten together, about an inch in length, spreading, the inner ones shorter, tomentose at the base. The angles at the top have the spines concealed among the wool, and they come out gradually as the stem grows up; the wool is white and brown. Flowers sessile, in the very angles of the extremities, scattered, ovate at the base, two inches long, elongated, red; berry unarmed; blood-red within, eatable. Native of Jamaica in dry open situations.—Swartz. The fruit is ripe in October. Sloane says he several times wounded both sorts, but could never find any gum transude from them. Barham calls them *dildoes*, which he says is the name of a plant which grows in all the southern parts of America, and in Jamaica. Some merry person gave it the name of *dildoe*; but in other places it is called *flambeau*, torch-wood, or prickle-candle, it being in the shape of four candles joined together in angles, growing one out of another, like the *raque*, and are from eight to fifteen feet long, set with sharp prickles all round from top to bottom, green, and full of juice. Some bear a yellow fruit, others blood-red, without-side, but of the same colour as the rest within; which is a white sweet pulp, full of small black seeds; and they have all a large white flower, smelling very sweet, which always comes out of that side of the plant next a south sun. Its fruit is as big as large apples.

When they grow old, and the green juice dries away, there is a yellow husk, or shelly substance, appears full of holes like net-work, which is called torch-wood, for it will burn like a candle and torch; and I have known the Indians fill the hollownes of these with a bituminous substance, making fine flambeaux.

3. PORTULACIFOLIUS. PURSLANE LEAVED.

Stem round, arboreous, thorny; leaves wedge-form, retuse.

Stem leafless, but armed with bundles of bristle-shaped spines; leaves on the branches wedge-shaped, emarginate, thick, succulent, sometimes alternate, sometimes two, three, or four, together, having a verticillated appearance, with subsolitary subulate spines, two, three, or four, together, frequently only one at their base. Flowers at the ends of the twigs, solitary, sometimes two together; petals rosaceous, flat, cordate; fruit roundish, somewhat angular, having no tufts of leaves on it, which distinguishes it from the *pereskia*, which it otherwise much resembles. There is a very beautiful tree of this species at the residence of the honourable mr. Hinchliffe, near Spanish-Town, not far from his house, which has two stems, each nearly a foot in diameter, and about eight feet high to the branches, which are thick, numerous, and armed with tufts of spines, spreading from twelve to fifteen feet on all sides: to

the top of the foliage the tree is full twenty-five feet high, and, when in bloom, has a very fine appearance, the flowers being so abundant as almost to hide the leaves.

See INDIAN FIG and MELON THISTLE.

TRAVELLER'S JOY—See VIRGIN'S BOWER.

TREE ATROPA.

ATROPA.

CL. 5, OR. 1,—*Pentandria monogynia*. NAT. OR.—*Luridæ*.

GEN. CHAR.—Calyx a one-leafed perianth, five-parted, gibbous; divisions acute, permanent; corolla one-petaled bell-shaped; five subulate distant filaments; anthers thickish: the pistil has a semi-ovate germ; a filiform style, and headed stigma; the pericarp a globular two-celled berry. One species is a native of Jamaica.

ARBORESCENS. TREE.

Stem shrubby, peduncles crowded, corolla revolute, leaves oblong.

This is a small tree, or rather a shrub. Stem smooth, branched, branches subdivided, round, scarred, rugged; leaves petioled, alternate, in tufts towards the ends of the branches, lanceolate-ovate, acute, entire, nerved, wrinkled beneath, soft, and hoary, of a dark colour. Flowers peduncled, heaped, scattered on the branches below the leaves, white, sweet-scented, nodding; peduncles numerous (thirty or forty) long, filiform, one-flowered, whitish, smooth; calyx short, tubular, four or five cleft, whitish; corolla somewhat bell-shaped, tube narrower at the base, swelling at the top; border four or five cleft, with equal, ovate, blunt, reflex, segments; filaments four or five, equal, twice as long as the corolla; anthers ovate, upright, two-valved; germ roundish, superior; berry roundish, soft, black, containing many seeds. Native of Jamaica, on temperate mountains, flowering in Autumn; the berries commonly full of some worm.—*Swartz*.

TREFOIL.

STYLOSANTHES.

CL. 17, OR. 2.—*Diadelphia decandria*. NAT. OR.—*Papilionaceæ*.

GEN. CHAR.—Calyx a one-leafed perianth, tubular, long, half five-cleft, corolliferous; corolla papilionaceous; germ below the corolla; legume short, thin, shaped like a scymitar. Two species are natives of Jamaica, separated from the genus *hedysarum* (see French honeysuckle) by *Swartz*, on account of the corolliferous calyx and inferior germ.

1. PROCUMBENS. PROCUMBENT.

Anonis non spinosa minor; glabra, procumbens, flore luteo. Sloane; v. 1, p. 187, t. 119, f. 2. *Procumbens, foliis ciliatis nervosis; siliculis monospermibus, acuminatis quinquestriatis.* Browne, p. 298.

Leaves ternate acuminate, linear, smooth, spikes many-flowered, stem procumbent.

Root

Root long, deep; stems many, round, hairy, from seven to twelve inches long, creeping, branched; leaflets small, smooth, shining, ciliate, having many beautiful white nerves on the under surface. The flowers come out towards the top, of an orange colour, with a little purple in the middle; legume small, rough, seldom exceeding two inches in length, never containing above one seed, which is reddish.

2. VISCOSA. CLAMMY.

Loto pentaphyllo siliquosa villosa similis, anonis non spinosa, foliis cisti instar glutinosi et odoratis. Sloane, v. 1, p. 186, t. 119, f. 1.
Suberectum et subhirsutum; siliculis minoribus, singularibus.
Browne, p. 299.

Leaves ternate, ovate, ciliate, hirsute; spikes four-flowered, stem erect.

Stems from one to two feet in length, shrubby, grey, branched into many twigs, which are green and hoary. Leaflets purple on the edge, having purple spots on the backs, and a down of the same colour; petioles half an inch long. Flowers on the tops of the twigs, yellow, several opening successively. Legume very short, thin, shaped like a scymitar, having several lines or nerves on it, containing one seed, which is shining, brown, with a point on one side and defect on the other. The whole plant is clammy, and grows in gravelly parts of town savannas.—*Sloane.*

See FRENCH HONEYSUCKLE.

TREMBLING GRASS—See MEADOW GRASS.

No English Name.

TRIOPTERIS.

CL. 10, OR. 3.—*Decandria trigynia.* NAT. OR.—*Trihilatæ.*

This is derived from the Greek words for three-winged, the fruit having three membranes.

GEN. CHAR.—Calyx a five-parted perianth, very small, permanent, with two honey pores at the base on the outside; corolla six petals, roundish, clawed: filaments ten, cohering at the base, with simple anthers: the pistil has a trifid germ, three erect styles, and obtuse stigmas: pericarp three erect capsules, one-seeded, three or four winged: seeds solitary, roundish. Two species are natives of Jamaica.

1 JAMAICENSIS. JAMAICA.

Seminibus trialatis, foliis ovato acuminatis, racemis terminalibus.
Browne, p. 231. Banisteria 3.

Leaves oblong, acuminate, veined, shining; racemes compound, terminating, loose, fruits three-winged.

This is a climbing shrub with a twining stem, and spreading, diverging, loose, round, smooth, branches. Leaves opposite, lanceolate-ovate, or ovate with a long point, quite entire, beautifully veined, dark green, on shortish petioles. Racemes terminating, seldom axillary, spreading like pannicles: branches opposite, subdivided, loose; flowers on short peduncles, scattered, pale blue, small.—*Swarz.* It grows in the gravelly hills about Kingston, rising by a slender stem seven to fourteen feet among bushes.—*Browne.*

2 CITRIFOLIA.

2. CITRIFOLIA. CITRON-LEAVED.

Leaves ovate, oblong, acute, smooth : umbells axillary, peduncled, fruits four-winged, wings in pairs, the lower ones shorter.

Stem shrubby, climbing very high ; branches very long, flexile, round, smooth ; leaves opposite, entire, nerved, veined, membranaceous, large, on short petioles. Branches of the umbels or panicles trichotomous, spreading, pedicels one-flowered : leaflets ovate, acute, alternate, sessile, scattered over the branches of the panicle. Flowers small, yellow. At the base of the segments of the calyx on the outside are two brown gibbous nectareous glands. Petals five, roundish, waved, veined, with linear claws ; filaments awl-shaped, contiguous to the base ; germs three united ; styles three, thickened at the top : stigmas acute ; capsules three ovate, separable, each four-winged ; two opposite wings larger, veined, two smaller ; and a fifth intermediate like a crest. Seed large, shining, red.—*Swartz.*

See SWITCH SORREL.

No English Name.

TRIPSACUM,

CL. 21, OR. 3.—*Monœcia triandria.* NAT. OR.—*Graminæ.*

GEN. CHAR.—Male calyx a four-flowered glume ; corolla a membranaceous glume : female calyx a glume with perforated sinuses ; corolla a two-valved glume ; styles two ; seeds one. There are only two species, one of which is a native of Jamaica.

HERMAPHRODITUM. HERMAPHRODITE.

Spica oblongo glabra, calicibus rigidis quadri-partitis, incisuris apertis, laciniis acuminatis. Browne, Cenchrus 2, p. 367.

Spike hermaphrodite.

Root annual, fibrous ; culm erect, two feet high, roundish, very smooth, jointed, branched ; branches of the same structure and height with the culm, alternate, erect, quite simple, few. Leaves alternate, fleeced, very smooth, only rugged at the edge, a span long or more ; sheaths compressed, striated, very smooth. A single spike at the ends of the stem and branches, solitary, cylindrical, curved ; peduncle long, round, striated, smooth ; receptacle compressed, flexuose. Flowers alternate, remote, solitary, sessile on the teeth of the receptacle, ovate, pressed close. The outer calyx has two, three, or four flowers ; glume four or five parted, compressed, ovate, gibbous at the base, contracted at the top ; the valves incumbent, very stiff, lanceolate, acuminate, very smooth, slightly sheathed. There is a single floret between each calycine glume, less by half than the calyx. Calyx two-valved ; one valve smaller, very long, and acuminate ; the other of the same size with the corolla, which is also two-valved, smooth, and acuminate. Filaments smooth, anthers ovate, germ ovate, styles two, pubescent. Seed one, very small, ovate, smooth, yellow, sub-diaphanous. *Linneus.* This is a common grass in the open pastures of Jamaica, and fed upon by all sorts of cattle.—*Browne.*

See GRASS.

No

No English Name.

TRIXIS.

CL. 19 OR. 4.—*Syngenesia polygamia necessaria*. NAT. OR.—*Compositæ*.

GEN. CHAR.—Common calyx imbricate, ovate; scales eight to ten oblong, acuminate, convex, almost equal; outer somewhat keeled, membranaceous at the tip; compound corolla, numerous hermaphrodite corollets, females fewer; corollets of the ray trifid; there is no pericarp, the calyx unchanged, converging; seeds hairy at the top, without any down; receptacle chaffy. There is only one species a native of Jamaica.

TEREBINTHINACEA.

TURPENTINE.

Leaves ovate, serrulate, hispid, hirsute beneath, flowers corymbed.

TRUMPET-FLOWER.

BRUNFELSIA.

CL. 14, OR. 2.—*Didynamia Angiospermia*. NAT. OR.—*Personatæ*.

So named after Otto Brunfelsius, who published the first good figures of plants in 1530.

GEN. CHAR.—Calyx a one-leafed perianth, bell-shaped, five-toothed, obtuse, very small, permanent: corolla one-petaled, funnel-form; tube very long, slightly curved inwards, (waved like an *Italic f*), border flat, five-cleft, blunt; stamens four very short filaments; anthers oblong, upright; two a little higher than the others, prominent from the mouth of the tube: the pistil has a roundish small germ, a filiform style the length of the tube, and a thickish stigma: the pericarp is a capsule, berried on the outside, globular, one-celled, two-valved: seeds very many, compressed, convex on one side, angular at the other, rugged with dots: receptacle fastened to the bottom of the capsule, chaffy; chaffs coadunate, subulate at the top, separating the seeds. There are two species, both natives of Jamaica.

I. AMERICANA.

AMERICAN.

Fruticosa, foliis subvillosis oblongo-ovatis, floribus singularibus.
Browne, p. 141. *Catesbea*.

Leaves elliptic-acuminate; tube of the corolla erect, border entire.

This is a tree from ten to fifteen feet in height, inhabiting the mountainous parts of Jamaica. The trunk is smooth and even and the branches loose; leaves alternate, entire, smooth, somewhat shining, on cylindric short petioles, somewhat reflex. Flowers axillary, terminating, peduncled; corolla pale yellow, turning white, very sweet scented, having a tube four or five inches in length, standing in a cup, somewhat resembling the Marvel of Peru: anthers globular bifid; those of the upper filaments, together with the stigma close up the aperture of the tube. The fruit is green with a red receptacle.—*Swartz*. This plant is figured in *Curtis's Botanical Magazine*, No. 393.

The receptacle of the flower is very short, and has its base beset with vertical rows of purple, unequal, linear, hairy, stipules, the upper row is much the longest, reaching half the length of the cup. The upper lip of the corolla is divided into two, and the under lip into three, round segments, nearly equal: the stamens are four filaments,

ments, two of the length of the tube, and the other two a little shorter, they are adherent three-fourths of their length, and free one-fourth, as they rise from the tube they are curved, and also at their extremity: the stigma is double, and each part obtuse, and the space between them is commonly filled with something like farina. The fruit is a berry, about as big as a boy's marble, globose, soft, smooth, and of a lovely orange or saffron colour, within it is filled with a soft white pulp, very sweet in taste, and divided into two cells; the seeds are kidney-shaped, and placed near the pericarp. The leaves surround the young branches in an alternate or irregular order; they have no pedicel, but are fixed to the stem by a swelling joint, they are narrower near the stem, and increase gradually in breadth to two thirds of their length, where they are broadest, thence they decrease in breadth to the extremity, where they end in a point, in a word their form is like that of calabash leaves, their upper part is very dark green, smooth, and polished, with plain reflected margins, marked with a yellowish middle rib, hardly visible, alternate oblique side veins; their lower side is of a paler green, and the middle rib only conspicuous. The longest leaves are little more than four inches long, and broad, of a sweetish bitter taste. The blossoms taste sweet like liquorice, but much inferior in degree; I found it in blossom in the road that leads from Longville to the Chapel, in Clarendon. I transplanted it in blossom in the beginning of the year, and it blossomed again in July of the same year.—*A. R.*

2. UNDEULATA. WAVED.

Leaves lanceolate-ovate, drawn to a point at both ends, petioles very short, tube of the corolla curved, border waved.

This is a shrubby plant, consisting of divers erect, woody, unbranched stems; about eighteen inches in height, bearing clusters of leaves upon their summits, hard and firm in substance, in form and size like those of *morinda* or yaw-weed; amidst which arise the blossoms, of a pale yellow colour; in which the rudiments of a fifth stamen rises from the base of the tube. The clusters of leaves sometimes resemble those of the calabash tree. The fruit is bigger than a hazle nut and round.

See FRENCH OAK, THORN APPLE.

TRUMPET FLOWER, PEACH COLOURED.

SOLANDRA.

CL. 5, OR. 1.—*Pentandria monogynia*.

NAT. OR.

This was so named after the celebrated Dr. Solander, a Swede, and disciple of Linneus.

GEN. CHAR — Calyx a one-leafed perianth, large, angular, permanent, three-cleft or five-cleft; segments lanceolate, erect: corolla one-petaled, funnel-form, very large; tube bell-shaped, ventricose, a little shorter than the calyx; border five-cleft; segments roundish, waved, patulent: stamens five filaments, filiform, length of the tube, ascending at the top; anthers oblong, versatile: the pistil has a superior germ, oval; style filiform, longer than the stamens, bent in; stigma obtuse, bifid; segments ovate; the pericarp an oval berry, conical at top, smooth, four-celled: seeds very numerous, oblong, nestling. There is only one species, a native of Jamaica.

GRANDIFLORA. GREAT-FLOWERED.

This is a small tree, from twelve to twenty feet high, with a branching trunk, and a cloven ash-coloured bark, green within. The wood is spongy. The branches are loose, bent down, divaricating, very long. The leaves are in clusters towards the ends of the branchlets, ob-ovate, oblong, acute, quite entire, smooth, thickish; and somewhat succulent, from three to seven inches in length, on round smooth petioles, five times shorter than the leaves. Flowers terminating, subsessile, subsolitary, very large; peduncles very short, thick, round, smooth, one flowered; calyx from two to three inches long, sub-quinquefid, as the fruit ripens bursting to the base into three or five segments; tube of the corolla greenish white; border ten times shorter than the tube, patulous, pale flesh colour, somewhat irregular veined; the opening four inches in diameter; segments wide, very bluntly waved, crenulate at the edge, almost equal, the upper ones being scarcely larger. Filaments inserted into the base of the tube, yellow; anthers large, ferruginous; germ smooth; style ascending at the top and yellow; lobes of the stigma roundish, green; berry often the size of a hen's egg, but thicker below, acuminate with the permanent base of the style, smooth, and even, white, pulpy, and red within; seeds black; the very handsome sweet flowers appear in the months of January and February; the fruit ripens in August, and is of a sweet subacid flavour. Native of Jamaica on very large trees, or in the fissures of rocks, scandent, and sub-parasitical.—Swartz.

TRUMPET-REED.

ZIZANIA.

CL. 21, OR. 6.—*Monœcia hexandria.* NAT. OR.—*Graminæ.*

GEN. CHAR.—No male calyx; corolla a two-valved glume, awnless, mixed with the females; nectary two-leaved; stamens six capillary, with linear bifid anthers. Female flowers in the same panicle, bigger, no calyx; corolla a two-valved glume, cowlled, awned; stamens six minute filaments, with small barren anthers; the pistil has an ovate germ, two very small styles, and feathered eminent stigmas; there is no pericarp; glumes closed, permanent; seed single, oblong, equal, shining, naked. Two species are natives of Jamaica.

1. AQUATICA. WATER.

Arundo alta gracilis, foliis e viridi ceruleis, locustis minoribus
Sloane, v. 1, p. 110, t. 67. *Panicula effusa.* Browne, p. 340.

Panicles racemed below, spiked above.

This puts forth roots from every joint, sending up round hollow culms, pointed at every two inches distant, of a clay colour, and about the bigness of ones little finger. The sheath of the leaf covers the whole internode, and the leaf is near half an inch broad at the base, tapers for more than a foot in length, and ends in a point of a bluish green colour. The stalks rise fourteen or fifteen feet high; the top is a panicle of a foot in length, branched out into many rough spikes. It grows plentifully in the lagoons about the Ferry and Passage-Fort.—Sloane. If this be the same plant as the North-American one, the seeds form an excellent article of food, and are a good substitute for rice, and for this reason it is called wild rice in America.

2. PALUSTRIS.

2. PALUSTRIS. MARSHY.

Sylvestris, assurgens, tenuis et ramosa; panicula laxa racemosa.
Browne, p. 340.

It appears very doubtful whether this is not the same plant as the first species; they are common in all the lagoons of Jamaica, and it is certainly worthy of experiment whether they produce seeds that will form so useful an article of food as the same plant does in America; they are so similar in all their parts to the American plant, that no scientific distinction has been drawn between them, and it is therefore extremely probable that they possess the same qualities. Carver says that in America it is the most valuable of all its spontaneous productions, as it affords in its grain not only a valuable food for the human species, but attracts an infinite number of wild-fowl, which become fat by feeding on the seeds.

TRUMPET-TREE, or SNAKEWOOD.

CECROPIA.

CL. 22, OR. 2.—*Dioecia diandria.* NAT. OR.—*Scabridæ.*

GEN. CHAR.—Male calyx an ovate spathe, bursting, caducous, containing very many aments, fasciculate, columnar, imbricate with scales; the scales (receptacles) copious, turbinate, compressed-quadrangular, obtuse, with a double perforation: no corolla, unless the scales be called nectaries; stamens two capillary very short filaments, from the perforations of the scales; anthers oblong, quadrangular. Female calyx a spathe; aments four, columnar, imbricate with germs; no corolla; the pistil has many imbricate germs, compound-quadrangular, obtuse; styles solitary, very short; stigmas somewhat-headed, lacerated: the pericarp is a berry, the form of the germ, one-celled, one-seeded: seed oblong, compressed. There is only one species, which is a native of Jamaica.

PELTATA. PELTATE.

Faruma de Oviedo. Sloane v. 1, p. 137, t. 88, f. 2, and t. 89. *Ramis excavatis, foliis amplis peltatis atque lobatis.* Browne, p. 111.

This tree rises to a considerable height, being seldom under thirty-five to forty feet high. The trunk and branches are hollow every where, and stopped from space to space with membranous septas, answering to so many light annular marks in the surface. It shoots both its leaves and fruits in the same manner, and each, while young, is covered with a membranous conic cap, which falls off from the base without splitting, as they acquire a certain degree of perfection. The leaves are few, alternate, large, at the ends of the branches, peltate, divided into many lobes like those of the papaw, downy white underneath, petioled; lobes entire, sharp, rugged on the upper surface, the nerves obliquely transverse, and the veins very much so. There are stipules between the leaves, as in the fig, opening on the side opposite to the leaf, obvolute, or imbricate on the edge, soon falling off.—*Linneus.* The fruits rise, four, five, or more, from the very top of a common peduncle, and shoot into so many oblong cylindric berries, composed of a row of little acini, something like the raspberry, which they resemble in flavour when ripe, and are agreeable to most European palates on that account. This tree is very common in most parts of Jamaica. The wood, when dry, is very apt to take fire by attrition; and has been, for this reason, much in use among

the native Indians, who always used to kindle their fires in the woods by these means. The bark is strong and fibrous, and frequently used for all sorts of cordage: the fruit is very delicate, and much fed upon by the pigeons and other birds, who by this means spread and propagate the tree in all parts of the island: and the smaller branches, when cleared of the septa, serve for wind instruments, and are frequently heard many miles among those echoing mountains; they yield an agreeable hollow sound: I have seen some cut and holed in the form of a German flute, and have not been displeased with their notes. The trunks are very light, and the most appropriated timber for bark logs, where such conveniences are used; which is often the case among the poorer sort of people. The trunk and branches of the tree yield a great quantity of fixed salt, which is much used by the French to despumate and granulate their sugars: such a mixture is always necessary in the manufacture of that commodity; and though the alkaline salts of lime are generally sufficient, yet, when the juices are thin and clammy, a stronger and more active salt is requisite, and will always answer the trouble of obtaining it.—*Browne*. The leaves bruised and applied, as well as the juicy pith of the tree, are mentioned by Sloane as an excellent vulnerary.

This is the common name this tree is called by in Jamaica, I suppose from its hollowness. It bears a long, crooked, soft julus, representing or resembling worms, and hath a very large indented leaf. It is of a very quick growth, growing very straight and tall, without any branches, and at the top there is a soft pappy substance, which some will eat; cattle will eat the leaves and its fruit, so will pigeons. The holly on the top of the tree contains a white, fat, and juicy pith, which some eat; but the negroes, with this, and with the young tender soft leaves, cure their wounds and old ulcers. I was once in the woods, and was caught in a great shower of rain, having only an old Congo negro with me, who made me a hut; and I, having heard that some negroes could make fire, as they called it, I asked him if he could do it; he said yes, and went and got a dry piece of this tree, and split it, making a little hole or dent in it with the point of his knife; he then took a small piece of harder wood, and made the end of it to fit that dent; then he sat down, and held the flat piece between his feet, and with the upright piece, which centered in the hollow of the other, twirled it round very swift between the two palms of his hands; it began to smoke in a very little time, and fire appeared, which he so managed that we had soon a very good fire. The juice of the tender tops is astringent, and good against fluxes, immoderate *catamenia*, and gonorrhœas; it is also good against the immoderate *lochia*, if a poultice of the leaves be applied to the navel. Its bark is very tough, and makes as good ropes as those of hemp. I knew a physician that cured many dropsical negroes with the ashes of this tree, which afterwards I made use of for the same purpose; and I observed, that they were the heaviest ash that I ever saw (which I discovered by weighing them with other wood-ashes), and made a stronger lixivium than any others, having a greater quantity of fixed salt in them; they are therefore proper for dropsical persons.—*Barham*, p. 195.

The ashes are strongly alkaline. A ley may be made with them and mixed with bitter-wood infusion, four ounces to be taken three or four times a day, in dropsy. The ley of these or any wood-ashes may be substituted for the salt of wormwood, when that cannot be had. An elastic gum is obtained from this tree.—*Dancer's Medical Assistant*.

TULIP TREE—*Sec MAHOB.*

TURKEY

TURKEY BERRIES.

SOLANUM.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT. OR.—*Luridæ.*

GEN. CHAR.—See Calalue, branched, vol. 1, p. 141.

MAMOSUM.

Solanum bacciferum, caule et foliis tomento-incanis, spinosis, flore luteo fructu croceo, minore. Sloane, v. 1, p. 236, t. 144. f. 3. S. 3 and 4 of Browne.

Stem prickly, herbaceous, leaves angular, lobed, villose on both sides.

Stem about five or six feet high, tomentose, prickly branched; prickles bending downwards; leaves alternate, on long prickly pedicels, large, roundish, angular lobed, soft, hairy on both sides, midrib prickly below. The flowers are produced in bunches from the side of the stalks, of a pale yellow or dirty white colour; succeeded by round yellow berries. There are two varieties, both very common in Jamaica, the berries about the size of small cherries, which are eaten by turkies, whence the name turkey berries, they are also known by the names *soushumber*, *cat-nail*, *Port-Morant tobacco*, and *macaw bush*. One of the varieties has a yellowish and the other a purplish stalk, and it is not easy otherwise to distinguish them; and both have the same virtues. The expressed juice or decoction of the leaves, rubbed on the parts, is good for the itch, and also for the mange in mules, especially if used externally with lime; and a drench of the juice may be also given now and then during the cure. The leaves boiled with a small proportion of oil-nut leaves are recommended as a good fomentation for sores. Horses eat the leaves.

This grows very common every where, even about the streets of towns and villages. The stalks are very thick set with short crooked prickles, the points downwards, woolly, round, and about three or four feet high; the leaves are pretty large, and deeply sinuated on the edges, and its big rib is set underneath with small prickles, so that they make a good fence; the flowers are monopetalous, though the *corolla* be divided into five petals, reflected back, of a yellowish colour, with apices like the rest of the solanums; then come round orange-coloured berries, as big as English pease, having five green capsula under them; the berries are full of an orange-coloured pulp, containing small white seeds. Their roots are very bitter, and of thin parts, and excellent virtue, half an ounce, in powder, purges all humours downwards, opens obstructions of the liver and prostrates, provoking urine, being used instead of the opening roots, which are so much esteemed. The decoction of the roots is diuretic, and good in burning fevers, and with honey in catarrhs, and in the strangury, with some cardamoms, it expels wind. The decoction of the leaves, with sugar and limes, is good for the itch. The juice of the roots and leaves is good for consumption, and with sugar for the soreness of the breast.—*Barham*, p. 117.

See CALALUE, Branched—EGG-PLANT—NIGHT-SHADES—POTATOES—TOMATO-BERRIES,

TURKEY BLOSSOM.

TRIBULUS.

CL. 10, QB. 21.—*Decandria monogynia*.NAT. OR.—*Gruinales*.

GEN. CHAR.—See Caltrops, v. 1, p. 144.

CISTIOIDES.

CISTUS-LIKE.

Foliis sex jugatis subæqualibus, flore amplo odorato. Browne, p. 220.
T. 1.

Leaves eight-paired, leaflets almost equal

This has a perennial woody root, from which spring many hairy, jointed, trailing stalks, near two feet long; at each joint are two pinnate leaves, which differ greatly in size, one being composed of eight, and the other of four, pairs of leaflets. Peduncles axillary, hairy, near two inches long, sustaining one pale yellow flower, composed of five large petals, with narrow tails, but very broad and rounded at their points; fruit roundish, armed with very acute spines. Browne supposed this to be the species *terrestris*, but Swartz made it the *cistioides*.

This plant, whether a native, or originally introduced into Jamaica, is now very common about Kingston, and grows very luxuriantly both in the eastern and western limits of that town. It is planted in many of the gardens for the sake of its flowers, which yield a pleasant agreeable smell. It is a spreading creeper, and runs frequently the length of three or four feet from the main root, throwing out many lateral branches on all sides. The fowls are observed to feed much on the blossoms of this plant where it grows wild, and is thought to heighten the flavour, as well as to contribute to fatten them.—*Browne*.

This plant grows very commonly all over Salt-Ponds, and is fed upon by all kinds of stock. Its beautiful yellow flowers are highly ornamental to the pastures, and it is remarkable as the first plant which springs when rain falls after a series of dry weather.

TURK'S HEADS—See MELON THISTLE.

TURMERIC.

CURCUMA

CL. 1, OR. 1.—*Monandria monogynia*.NAT. OR.—*Scitamineæ*.

GEN. CHAR.—Calyx a superior obscure perianth; corolla has the tube of the petal narrow; border three-parted; divisions lanceolate, spreading, gaping more on one sinus; nectary one-leafed, ovate acuminate, larger than the divisions of the petal, inserted into the more open sinus; stamens five filaments, of which four are erect, linear, barren; one within the nectary, linear, petal-form, with a two-cleft top; anthers adnate: the pistil has a roundish inferior germ, a style length of the stamens; stigma simple, hooked: the pericarp is a roundish capsule, three-celled, three-valved; seeds very many. All the species are natives of the East-Indies, the most useful has been introduced into Jamaica.

LONGA.

LONG.

Leaves lanceolate, lateral nerves very numerous.

Root perennial, creeping, fleshy, palmate, with columnar branches, and parallel rooting
rings.

rings, the skin thin and pale, the flesh saffron coloured, with a bitterish taste, and smell of salve. Stem none; leaves broad-lanceolate, large, quite entire, smooth, annual, supporting and embracing each other. Scape external, slender, nearly erect, almost naked, approximating to the bundle of leaves; spike thick, sub ovate, three inches long; flowers sessile, white, with a yellow nectary, solitary, and inclosed within the scales of the spike. Border of the corolla four-parted, two lateral segments blunt, the upper acute; seeds few; no barren filaments.—*Linneus*.

This plant thrives very well in Jamaica, but has not been much cultivated, though it may now be found in almost a wild state in many places where it formerly has been planted, since its introduction by Zachary Bayley Edwards, esq. in the year 1783. The mode of curing it for market is simply by drying it in the sun, either whole, or, to expedite the process, cut in pieces. The roots should be dug as soon as the flower stems fade.

Turmeric has a slight aromatic and not very agreeable smell, and a bitterish somewhat warm taste. It readily gives out its active matter both to aqueous and spirituous menstria; communicating to the former its own deep yellow, and to the latter a fine yellowish red tincture. Distilled with water it yields a small quantity of a gold coloured essential oil, of a moderately strong smell and pungent taste: the remaining decoction inspissated leaves a bitterish, considerably saline, mass. The inspissated extract from rectified spirit is moderately warm and bitter, and not a little nauseous. In the eastern countries, this root, besides its use in colouring and seasoning their food, is much recommended as a medicine; being accounted one of the most effectual remedies in obstructions of the viscera and mesentery, which are there frequent; in uterine disorders, difficulties of water, and affections of the kidneys. Among us it has only been employed by way of decoction, infusion, and powder, as a deobstruent, in hypochondria, leuco phlegmatic, and cachectical constitutions; and esteemed by some as a specific in the jaundice; the dose in substance is from a scruple to a drachm; in decoction or infusion twice as much. It tinges the urine of a deep yellow colour.—*Lewis' Mat. Med.*

A plaster of turmeric, well bruised, top and roots, is thought to be good against the bite of the rattle-snake. *Phil. Tran. No. 479, p. 144.*

TURNIP.

BRASSICA.

CL. 15, OR. 2.—*Tetradynamia siliquosa.*

NAT. OR.—*Cruciferae.*

GEN. CHAR.—See cabbage, vol. 1, p. 130.

RAPA.

Root caulescent, orbicular, depressed, fleshy.

This useful culinary plant is generally cultivated in Jamaica from seeds imported from Europe or America, which produce turnips of a very sweet flavour, but never of that size they commonly arrive to in their natural soil. In new burnt off grounds, however, when the seeds are scattered among the ashes, they grow to a considerable size, and are of a much milder consistence and taste than in their native soil. Unless the ground where they are sown be pretty hard, they are apt to run into long roots, from not receiving sufficient resistance in their vegetation; it is therefore better not to dig the beds in which they are sowed.

Turnips

Turnips are accounted a salubrious food; demulcent, detergent, somewhat laxative and diuretic, but liable, in weak stomachs, to produce flatulencies, and prove difficult of digestion; the liquor, pressed out from them, after boiling, is sometimes used medicinally in coughs and disorders of the breast. The seeds have been accounted alexipharmic or diaphoretic; they have no smell, but discover to the taste a mild acrimony, seemingly of the same nature with that of mustard seed, though far weaker.—*Lewis's Mat. Med.*

TURN SOLES.

HELIOTROPIUM.

CL. 5, OR. 1.—*Pentandria monogynia.* NAT. OR.—*Asperifoliae.*

This generic name is derived from two Greek words, signifying the sun and to turn, because the leaves were supposed to turn towards the sun. Hence also the English name.

GEN. CHAR.—Calyx a one-leaved perianth, tubular, five-toothed, permanent; corolla monopetalous, salver-shaped; tube the length of the calyx; border flat, half five-cleft, obtuse; clefts smaller, alternate, more acute, between the larger ones; throat naked: stamens five very short filaments, in the throat, anthers small, covered: the pistil has four germs, style filiform, length of the stamens; stigma emarginate: no pericarp; calyx erect unchanged, cherishing the seeds in its bosom; seeds four, ovate, acuminate. Five species are natives of Jamaica.

1. INDICUM. INDIAN.

Heliotropium Americanum cerulium, foliis hormini. Sloane, v. I, p. 213. *Herbaceum majus hirsutum, foliis rugosis cordato-ovatis, spicis crassis geminatus terminalibus.* Browne, p. 50, H. 1.

Leaves cordate-ovate, acute, somewhat scabrous, spikes solitary, fruits bifid.

Stem herbaceous, a foot and a half or two feet high, round, scabrous, hirsute, subdivided; leaves cordate-spatulate, ovate, slightly serrate, wrinkled, nerved, hairy, softish; on pretty long petioles, two and a half inches long, and one and a half broad in the middle. Spikes terminating, single or solitary, sometimes, but very seldom, double; sometimes also from the sides of the branches, reflex only at the end. Flowers sessile, pointing one way, approximating in a double row, small, blue; tube very long, cylindric, not globular, as in the others, border scarcely half five-cleft, segments equal, blunt; throat five-rayed, orange-coloured, closed. Germs in connate pairs; seeds one-celled; two, three, or four, of unequal sizes, and if more than two the rest are abortive; the fertile ones are ovate, acuminate, swelling a little on the outside, covered with a juicy bark, and slightly connected at the base. A decoction of this plant has been found beneficial as a diuretic, in a suppression of urine.

Besides the garden clary, we have a very common plant, that grows every where in Jamaica, called wild clary. The stalk is large, green, and hairy, rising about two feet high; the leaf like garden clary, having many five-leaved flowers, of a pale blue colour, set in a double row on the upper side of the branches, and turned like a scorpion's tail. Like the *heliotropes*, it cleanseth and consolidates wounds and ulcers, and is good against the inflammations of the skin. It is boiled with cocoa-nut oil, to cure the sting of scorpions and the bite of a mad dog. *Barham, p. 42.*

2. FRUTICOSUM.

2. FRUTICOSUM. SHRUBBY

Heliotropium minus lithospermifolius. Sloane, v. 1, p. 214, t. 132, f. 4. *Fruticulosum hirsutum, foliis lanceolatis minoribus, spicis singularibus terminalibus*. Browne, p. 151, H. 4.

Leaves linear-lanceolate, hairy; spikes solitary, sessile.

The small shrubby turnsole grows commonly about Old Harbour, seldom rising more than five or six inches. The leaves are small and hairy, and the stalks of a shrubby appearance. Spikes always single and not much bent, small and slender. Browne. — Flowers terminating, on short pedicels, pointing one way, on short, axillary, hispid, peduncles; segments of the calyx upright, stiff; corolla white, border five-cornered; throat closed, pale, having five rays from the centre to the angles of the border; filaments from the middle of the tube; anthers converging and cohering at the tip; the germ ovate, style short subulate, stigma capitate; capsule roundish, containing two hemispherical seeds.

3. CURRASSAVICUM. CURACOA.

Heliotropium maritimum minus, folio glauco, flore albo. Sloane, v. 1, p. 213, t. 132, f. 3. *Supinum leucopheum molle, foliis angustis*. Browne, p. 151. H. 3.

Leaves lanceolate-linear, smooth, without veins, spikes conjugate.

Stem round, smooth, juicy, white, seldom more than fourteen or sixteen inches high: it grows in tufts, and always found spreading about the root, and is easily distinguished by its whitish, smooth, narrow, leaves, which are in tufts, somewhat blunt, upright, on very short petioles, some alternate, others opposite. Spikes in pairs, on a common peduncle, and recurved; the corolla white with a yellow base and an open throat; the fruit an ovate globular berry, containing four nuts, drying as it ripens, and divisible into four parts; seeds solitary, ovate-oblong, having a very short beak, convex on one side, slightly concave on the other. Sloane says it grows on salt marshy grounds near the seaside.

4. GNAPHALODES. GNAPHALIUM-LIKE.

Heliotropium arboreum, maritimum, tomentosum, gnaphali Americani foliis. Sloane, p. 213.

Leaves linear, obtuse, tomentose; peduncles dichotomous; flowers of the spikes in fours; stem frutescent.

This is an upright shrubby plant, commonly two feet high, sometimes rising six feet, woody, and firm; bark downy, smooth, and white; branches towards the top, round, little divided, the younger scarred at bottom where the leaves have grown, altogether forming a convex, white, handsome, head, visible far off at sea. Leaves wedge-linear, veinless, thick, tomentose on both sides, glaucous, sessile, numerous, crowded at the ends of the branches; common peduncles round, tomentose, erect, a little longer than the leaves, terminating, few on each branch, bifid or trifid at top; single pedicels spring from the divisions, and form a spike directed one way, frequently bifid itself, but sometimes simple; flowers small, with the calyxes of all so connected that no one can be taken out without tearing the next; corolla white. Retzius.

5. PARVIFLORUM.

SMALL FLOWERED.

Hirsutum latevirens, foliis rugosis ovatis, spicis gracilioribus singularibus lateralibus, quandoque terminantibus. Browne, p. 151.

Leaves ovate, wrinkled, scabrous, opposite, and alternate.

This is nearly allied to the first species. Stem erect, pubescent, a foot high; most of the leaves opposite, except those in the middle of the stem, which are alternate, petioled, lucid, acute. Peduncles opposite to the leaves, or from the divisions of the stem, longer than the leaves, erect, each having two recurved imbricate spikes; corolla minute, pervious, white with a yellow base. The seeds are contained in a roundish capsule, with four cells and one seed in each.

TURTLE OR MANATEE GRASS.

ZOSTERA.

CL. I. OR. 1.—*Monandria monogynia.*

NAT. OR.*Inundatæ.*

GEN. CHAR.—Spadix linear, within the sheath of the leaves, flower bearing on one side; no calyx nor corolla; anther sessile, opposite to the germ; stigmas two, linear; capsule one-seeded.

MARINA.

MARINE,

Alga angustifolia vitrariorum. Sloane, v. 1, p. 61. *Foliis fere linearibus.* Browne, p. 71.

Roots fibrous from the joints of the long, round, smooth, branching, stem, which at the base is decumbent, but above floating, leafy, and compressed a little. Leaves alternate, petioled, very long, linear, flaccid and tender, bluntish, quite entire, and smooth, a little above the base opening into a longitudinal fissure, and putting forth a flat linear spadix, bearing flowers on one side. The flowers are completely protected from the salt water, under which they grow, by this sheathing base of the leaf, which closely enfolds them. This plant is the same as the European one, and grows frequently in the shallow sandy bays of Jamaica, and is the common food of the manatee, the turtle, and trune fish, as well as other marine animals. Buildings have been thatched with the green leaves, and the covering will endure upwards of a century. Exposure to the weather bleaches it white. It is used by the inhabitants of Gothland as manure, and also for the purpose of stuffing beds. Horses and swine eat this plant, and cows are fond of it.

VANGLO, OR OIL PLANT.

SESAMUM.

CL. 14, OR 2.—*Didynamia, angiospermia.* NAT. OR. *Lurida.*

GEN. CHAR.—Calyx a one-leafed five-parted perianth, erect, equal, very short, permanent; segments lanceolate, the upper one shorter; corolla one-petaled, bell-shaped; tube roundish, almost the length of the calyx; throat inflated, spreading, bell-shaped, very large, declined; border five-cleft; segments four, patulous, almost equal, and a fifth, which is the lowest, a little longer, ovate, straight; stamens, four filaments, springing from the tube, shorter than the corolla, ascending, setaceous, the two inner shorter; with the rudiment of a fifth filament; anthers oblong, acute, erect; the pistil has an ovate hirsute germ; a filiform style, ascending, a little longer than the stamens; stigma lanceolate, two-parted; lamellæ parallel; the pericarp is an oblong capsule, obscurely four-cornered, compressed, acuminate, four-celled; seeds very many, sub-ovate. Two species are cultivated in Jamaica very generally.

1. ORIENTALE. EASTERN.

Folius omnibus oblongis serratis. Browne, p. 270, S. 2.

Leaves ovate-oblong, entire.

Stem erect, round, hairy, with few branches placed below; leaves petioled, veined, having small hairs scattered over them. Flowers axillary, solitary, on a very short peduncle, at the base of which are two short linear bractes, and within each a yellow perforated gland; calyx gaping, almost equal; corolla obscurely five-lobed, blunt, the lower lobe more produced and rounded; stamens four, two above the others, and between the latter the castrated rudiment of a fifth filament; capsule oblong, acuminate, rounded-quadrangular, with a groove on each side, four-celled, two-valved; partition double; one thicker, solid, from the dorsal groove of the valves; the other thinner bilamellate, formed from the margins of the valves bent in; seeds ovate-acuminate, compressed a little, smooth, whitish, marked on one side with a slender longitudinal streak, fastened along the central angle of the cells—*Linneus and Gærtner.* This is a native of the East Indies, and lately brought to Jamaica, under the name of *Zezegary*, though Browne notices it as common in the island in his time, and it may be doubted whether it is not really indigenous, he says it was cultivated in Carolina with great success, where it was computed that nine pounds of the seed yielded upwards of two pounds of neat oil, which grew more mellow and agreeable from age, and continued without any rancid smell, or taste, for many years. In two years it becomes so mild, that, when the warm taste of the seed is worn off, it is used as a salad oil, and for all purposes of sweet oil. It is frequently cultivated in the Levant and Africa as a pulse, and the negroes parch the seeds over the fire, mix them with water, and stew other ingredients with them. A pudding is made with them, in the same manner as with millet or rice. In Japan and China they use the oil for frying fish, and dressing other dishes; as a varnish; and medicinally as a resolvent and emollient. The seeds are frequently used in broths, and made into cakes. A decoction of the leaves and buds is looked upon as a good resolutive, and frequently ordered in inflammations of the eyes, where warm fomentations become requisite. The leaves are of a very mucilaginous nature, as well as the seeds, and the emulsion of both have been recommended as excellent remedies in dysentery. Long observes that this plant requires a rich warm soil, and that few plants deserve to

be more generally cultivated, on account of the many domestic uses to which the oil with which it abounds may be applied.

This is called *sesamum*, or *sesamum Africanum*. The first time I saw this plant, it was growing in a negro's plantation, who told me, they ground the seed between two stones, and eat it as they do corn. I observed it hath a small long fibrous root, from whence springs up a straight square stalk, like a nettle, two or three feet high, set about with long leaves opposite to one another, and jagged, much resembling the *lamium*, or archangel; and at the tops of the stalks come forth divers white flowers, like *digitalis*; after which come their seed-vessels, full of small white seeds, which the negroes call *soonga*, or *wolongo*, which is much like the sago sold in shops, but very oily. The oil that is drawn from it is called *sergilim* oil. The seed is often mixed and ground with coco, to make chocolate. In Ethiopia and Egypt, they use the oil as we do oil-olive: It is made by grinding the seed, and expressing the oil, as they do by other seeds. The seed and oil are hot, moist, emollient, and resolving; breed gross nourishment, and therefore hurtful to weak stomachs. Dropped into the ear, it is good to soften the hard wax, and help deafness. A decoction of the plant is good for coughs, pleurisies, inflammations of the lungs, hard schirrous tumours, and women use it for hardness of the womb. The herb and seed, boiled in honey, make a good cataplasm or poultice for hard tumours, and dried nerves or shrunk sinews; so doth the oil. A decoction of the whole herb, flowers, and seeds, is good in clysters, to soften the belly, and give a stool or two. The juice of the herb or distilled water is good for sore eyes. The decocted seed fattens, the oil more, and the dregs (which are eaten for food in Ethiopia) more than the oil; women often drink the oil, to be fat. The dregs (when they make the oil by boiling) is given to four ounces in pleurisies and pains, and in all diseases of the skin, outwardly as well as inwardly. In Greece, they use it for cakes, mixing it in making their bread. In Bengal it is planted to make oil; but it makes ground poor. The oil takes off the roughness of the throat, clears the voice, and mollifies hard imposthumes. This oil is better for making odorous oil than others, because of its durability. The oil, if taken to four ounces for many days, is good against the itch, hard breathing, pleurisies, pains in the stomach, womb, and guts, and is every way as effectual as linseed oil. Sir H. Sloane saith, that Mr. James Cunningham, F. R. S. and his very good friend, wrote to him from China, where he was physician to the English factory, informing him, that the bean, or mandarin broth, so frequently mentioned in the Dutch embassy, and other authors, is only an emulsion made of the seeds of *sesamum* and hot water.—*Barham*, p. 121.

2. INDICUM. INDIAN.

Sesamum veterum. Sloane, v. 1, p. 161.—*Foliis inferioribus trifidis dentatis, superioribus oblongis serratis*.—*Browne*, p. 270, S. 1.

Lower leaves trifid.

This plant very much resembles the former, and possesses, in all respects, the same virtues, and perhaps may only be a variety.

VANILLA

VANILLA.

EPIDENDRUM.

CL. 20, OR. 1.—*Gynandria Diandria.* NAT. OR. *Orchideæ.*

GEN. CHAR.—See Greenwithe, vol. 1, p. 339.

VANILLA.

Lobus oblongus aromaticus. Sloane, v. 1, p. 180 — *Scandens. foliis elliptico ovatis, nitidissimis, margine membranaceo cinctis, subsessilibus; inferioribus claviculis jugatis, superioribus oppositis.*—Browne, p. 326.

Leaves ovate-oblong, nerved, sessile, cauline, tendrils spiral.

Stems sub-parasitical, climbing very high, rooting by means of simple fibres like tendrils opposite to the leaves, sub-flexuose, leafy, sub-divided at top, round, thick, succulent, smooth; leaves sessile, or half embracing, or somewhat sheathed, alternate, ovate, acuminate, half a foot long, entire, longitudinally nerved, very smooth, thick; flowers peduncled, axillary, solitary, large, purple; peduncle axillary, one or two flowered, short; with a sessile ovate-leaflet or bracte under each flower; siliques pendulous, half a foot long and more, smooth, one-celled, three-valved; seeds roundish, black, shining.—*Swartz.* The pods grow in pairs, are generally the thickness of a child's finger, and about five or six inches in length; they are green at first, then yellowish, and turn of a brownish cast as they ripen. The stalk is moderately slender, and throws out a long winding tendril opposite to each of the lower leaves, by which it sticks to the branches of a tree; but after it gains the top, then become useless, and the place of each is supplied by a fellow leaf. It is found wild in all parts of the mountains, particularly in the parishes of St. Ann and St. Mary, and grows most luxuriantly in cool and shady places. If the pods remain too long upon the stems they transude a black fragrant balsam, which carries off both the smell and delicacy of the seeds, which are frequently mixed with chocolate, to which they yield a delicate smell and agreeable flavour; and are used to perfume snuff and other substances. As a medicine they are commonly looked upon as cordial, stomachic, and good in nervous complaints; as provokers of urine and resisters of poison.—*Browne.* When this plant is designed for propagation, cuttings may be taken of about three or four joints, and planted close to the stem of trees, in low, moist situations. The earth is afterwards to be kept clear from weeds, which, if permitted to grow about the cuttings before they are well-rooted, would overbear and destroy them; but, after they have fastened their shoots to the stems of the trees, they are out of danger from injuries of this sort. They do not produce flowers until they are grown strong, so that some affirm, that six or seven years pass from the planting to the time of their bearing fruit; but when they begin to flower and fructify, they continue bearing for several years without any further culture. It produces but one crop of fruit in a year, which is commonly ripe in May, or fit for gathering; for it is not suffered to remain until it is perfectly mature, because it is then not so fit for use. When it is about half changed yellow, it is esteemed better for keeping than when it is changed to a brown colour, at which time it splits and discloses its seeds. While green, it affords no remarkable scent, but, as it ripens, it emits a most grateful aromatic odour. When the fruit begins to open, the birds attack it and devour all the seeds very greedily, but do not eat any other part of the fruit. The method used to prepare it is to gather it when it turns of a yellow colour. It is then piled in small heaps to ferment two or three days, and afterwards

afterwards laid in the sun to dry: when about half dry the pods are flattened with the hand, and rubbed over with oil of *palma christi* (or of the cocoa); then exposed once more to the sun, rubbed a second time with oil, and put in small bundles, covered with Indian leaves to preserve them. In some parts they are gathered and hung up by the end in some shady place to dry, and, while they are drying, press them every now and then between the fingers gently to flatten them; then the oil is rubbed on, to prevent them from drying too fast and bursting open; which is repeated till they are fit to be rolled up in leaves or paper. In other parts, after gathering, they scald them in the following liquor; a brine is made of salt and water strong enough to bear an egg; to this is added a fourth part of chamber lye, and a small quantity of quick-lime; these are boiled together for half an hour. The vanillas are put into this liquor, until they are thoroughly scalded, then taken out and dried in the shade. When fit for market, they are put up from fifty to one hundred and fifty in little bags. The Spaniards are very attentive to the manuring and cultivating their vanilla grounds, moulding the plants up as they grow, and fix poles for them to run on. The vanilla yields a great quantity of oil and volatile salt.—*Long*, p. 715.

See GREEN-WITHE.

VELVET-BUR—See VERVAIN.

VELVET-LEAF.

CISSAMPELOS.

CL. 22, OR. 12 — *Diccia monodelphia*. NAT. OR.—*Sarmentaceæ*.

GEN. CHAR.—No male calyx, unless the corolla be called so: corolla four-ovate petals, flat, expanded: nectary the membranaceous disk of the flower, wheel-shaped; stamens four very small coalescent filaments; anthers broad, flat; the female calyx none except the bracte; no corolla; nectary the membranaceous lateral edge of the germ, dilated outwards; the pistil has a roundish germ, three styles, three stigmas, erect, acute; the pericarp a globular one-celled berry: seed solitary, wrinkled, somewhat compressed. Two species have been found in Jamaica.

1. PEREIRA.

Clematis baccifera, glabra et villosa, rotunda et umbilicato folio. Sloane, v. 1, p. 200.—*Scandens, foliis peltatis, orbiculato-cordatis villosis; floribus masculinis racemosis, femininis spicatis, spicis foliolatis*.—*Browne*, p. 357.

Leaves peltate, cordate, emarginate, and entire.

Stem climbing and twining from ten to fifteen feet in height, lax, round, striated, smooth or hirsute. Leaves sub peltate, cordate-roundish, tomentose; petioles round, reflex, of a middling length; racemes compound, axillary, diœcious. Males subdivided, many flowered; flowers numerous, heaped, dusky yellow, minute; calyx four-leaved, leaflets lanceolate, obtuse, concave, spreading, coloured; no corolla; nectary the disk of the flower, smaller than the calyx, entire, a little concave, coloured; filament single, very short, in the middle of the nectary; anther roundish, capitate, the margin four-parted (but not four anthers), the incisures polliniferous. Female racemes
more

more simple, with five or six crowded peduncles, which are one-flowered, flowers extremely minute, yellow; bractes petioled, roundish, one under each pedicel; calyx one-leaved, the lacinia lateral, ovate, attenuated at the base, fastened to the germ at bottom; corolla a single petal, within the lacinia of the calyx, and only half the size of it, lateral, ovate, obtuse, convex, attenuated at the base, deciduous. Germ obliquely fastened to the pedicel, roundish, hirsute, style subulate, erect; stigma trifid, spreading; the fruit is a roundish, compressed, scarlet, drupe, containing a single nut, or very hard seed, compressed, triply echinate-wrinkled at the edge, two-celled; cotyledons ovate. In mountain coppices it is smooth, with cordate-entire leaves, hoary underneath. In champaign calcareous situations it is hirsute, with cordate-roundish emarginate leaves, which are tomentose.—*Swartz*. The leaf of the plant applied whole or bruized to a wound cures it effectually, and is also a remedy against poisoned bites.—*Sloane*. The decoction of the root is looked upon as an excellent diuretic, in frequent use among the negroes for obstructions in the urinary passages. It thrives best in a rich shady soil, and is easily propagated.—*Browne*. The roots are black, stringy, and as thick as sarsaparilla, running superficially under the surface of the ground; they are agreeably aromatic and bitter, and have been recommended in nephritic disorders, in ulcers of the kidneys and bladder, in humoral asthmas, and in some species of jaundice. A decoction of them is used for pains and weakness of the stomach.—*Wright*.

This is a convolvulus plant. It grows in great plenty amongst ebonies, climbing about them. Its leaves are as soft as any velvet, which makes the planters call it velvet-leaf; they are about the bigness of an English crown piece, rounding like the *assarabacca*, &c. of a yellowish-green colour. It is a most excellent antidote against poison, inwardly taken or outwardly applied; I have seen it heal a wound to admiration, by just laying one of the leaves upon the wound; it cures ulcers in the lungs. I knew a physician perform great cures on consumptive persons, who told me that his remedy was only a syrup made of the leaves and root of this plant, for which he had a pistole a bottle.—*Barham*, p. 200.

2. CAPEBA.

Leaves petioled at the base, entire.

This has round, heart-shaped, leaves, extremely woolly, and soft to the touch, their footstalks placed at the base between the two ears; the flowers in bunches from the side of the stalks. Every part is covered with a soft woolly down.

No English Name.

VERBESINA.

CL. 19, OR. 2.—*Syngenesia polygamia superflua*. NAT. OR. *Compositæ*.

GEN. CHAR.—Common calyx concave, in a double row; compound corolla radiate; florets of the ray about five; pericarp none, calyx unchanged; pappus awned; receptacle chaffy. Four species are natives of Jamaica.

1. ELATA

1. ELATA. WINGED.

Chrysanthemum cannabinum Americanum alatum, flore aphylo, globoso, aurantio, baccharidis foliis. Sloane, v. 1, p. 261.—*Foliis oblongo ovatis, subdentatis, recurrentibus; floribus remotis terminalibus.*—Browne, p. 319.

Leaves alternate, decurrent, waved, obtuse.

This is an herbaceous plant, with an upright stem, two feet high, sub-divided, round, winged, rough-haired; branches alternate, erect, axillary; leaves oblong, acuminate, angular-toothed, nerved, somewhat rugged, rough-haired. The stem has four wings, formed by the leaves running down it; hence its trivial name. Peduncles elongated, terminating, pubescent, with flowers in single heads, of a deep orange colour. Common calyx, sub-imbricate; the outer scales longer, obtuse, linear; inner shorter, membranaceous. In the hermaphrodite florets the style is cloven at the tip, and the stigmas thicker and compressed. The female florets in the ray are numerous, ovate, and emarginate; the germ ovate, margined; the style cloven, and the stigmas reflexed. All the seeds are ob-ovate, wedge-shaped, with white membranaceous wings; pappus two-awned; one awn longer than the other, hooked; chaffs of the receptacle linear acute, membranaceous, compressed.—*Swartz.* Browne says this plant is common on the north side of the island, and remarkable for the edgings of its stalk. Sloane found it near the bridge over Black-River in St. Dorothy's.

2. NODIFLORA. KNOT-FLOWERING.

Chrysanthemum conyzoides nodiflorum, semine rostrato bidente. Sloane, v. 1, p. 262, t. 155, f. 1.—*Erecta hirsuta, foliis subsessilibus ovatis oppositis, floribus coarctis alaribus.*—Browne, p. 319, v. 3.

Leaves opposite, ovate, serrate; calyxes oblong, sessile, cauline lateral.

Root annual; stem herbaceous, branched, a foot high, round, even; leaves sessile, mostly terminating cuneate-ovate, acuminate, nerved, hispid. Flowers sessile, in the axils of the terminating leaves, two or three together; calyx single, of four scales, two of which are longer, lanceolate hairy. Hermaphrodite florets five; female florets four or five, short, blunt, emarginate; seeds of the disk black, with two long awns; of the ray wider, tooth-letted at the edge, and membranaceous, awnless at the top.—*Swartz.* The erect verbesina with simple opposite leaves is common every where in the lowlands. It seldom branches or divides in its growth, and rises generally from eighteen to twenty-four inches.—*Browne.*

3. MUTICA.

Chrysanthemum palustre minimum repens, apii folio. Sloane, v. 1, p. 263, t. 155, f. 3.—*Minima arvensis; foliolis superioribus tridentatis, inferioribus laciniatis.*—*Anthemis.* Browne, p. 320.

Leaves trifid laciniate, serrate; stem creeping.

Root annual. Stem herbaceous, procumbent, and creeping, branched, striated, smooth; branchlets alternate; leaves alternate; the upper ones three-parted; leaflets wedge-shaped, toothed, blunt; the lower ones entire or sub-trifid, toothed, ovate, blunt, smooth, glaucous beneath; petioles decurrent, embracing, the length of the leaves, smooth. Peduncles terminating, one-flowered; flowers small, yellow: common

calyx

calyx double or calyced, outer of five linear scales; inner also of five, which are larger, membranaceous, whitish. The four or five middle florets of the disk are five-toothed; the rest, nearer to the ray, smaller and four-toothed; germ compressed, style cloven, stigmas slender, reflexed. Female corollets of the ray two-toothed, spreading; stigma bifid; fruiting calyx more spreading. Inner seeds of the disk oblong, compressed, with a membranaceous serrate margin; outer round, striated, obtuse, toothed, having a point in the middle. Seeds of the female florets compressed, minute, but commonly wanting. No seed-crown. Chaffs linear, but none in the middle. Native of the West-Indies, in moist pastures. The genus of this plant is difficult to determine; for, having no seed crown, it is not properly a species of *verbesina* or *bidens*, and should rather be referred to *anthemis*, but the habit is different.—*Swartz*.

4. PINNATIFIDA. PINNATIFID-LEAVED.

Leaves alternate pinnatifid.

Stem a fathom high, round, somewhat tomentose, putting forth opposite branches. Leaves somewhat rugged, narrowed at the base, each border decurrent and forming a curled wing, so that the stem is four-winged; the segments of the leaves serrate. The flowers are numerous, forming corymbs at the top of the stem and branches. Calyx ob-ovate, imbricate; scales ovate-acute, brown at the top, the inner ones longer; corolla yellow; females in the ray about fourteen, linear, trifid, with the middle toothlet shorter; germ in all small, turbinate; stigmas revolute, yellow; receptacle flat, chaffs the length of the florets, keeled, oblong, with a sharp point. Seeds ovate, emarginate, and crowned with two fine awns; the central ones girt longitudinally with two wings, those of the ray with three.—*Cavanilles*.

VERVAIN.

VERBENA.

CL. 2, OR. 1.—*Diandria monogynia*. NAT. OR.—*Personatæ*.

GEN. CHAR.—Calyx a one-leafed, angular, tubular, linear, five-toothed, perianth; the fifth toothlet truncate, permanent; corolla one-petaled, unequal, tube cylindrical, straight for the length of the calyx, then widening and curved in; border spreading, half five-cleft; segments rounded, almost equal; stamens two or four filaments, bristle-shaped, very short, lying within the tube of the corolla; two of them shorter, (when there are four); anthers curved in, as many as there are filaments; the pistil has a four-cornered germ; a simple filiform style the length of the tube; and an obtuse stigma; the pericarp is very slender, and scarcely manifest, or almost none; calyx containing the seeds, which are two or four, oblong. Seven species are natives of Jamaica.

1. JAMAICENSIS. JAMAICA.

Verbena folio sub rotundo serrato flore cæruleo.—Sloane, v. 1, p. 171, t. 107, f. 1. *Erecta divisa, spicis e divaricationibus supremis assurgentibus*.—Browne, p. 115, v. 1.

Two stamened, spikes very long, fleshy, naked; leaves spatulate-ovate, serrate, stem rough haired.

Stem from two to four feet high, very much branched and diffused, suffrutescent at the base; stem and branches rough with hairs. Leaves at the joints opposite, on short footstalks,

footstalks, ovate, obtuse, or acute, serrate, gradually and for a considerable length attenuated at the base. From the axil between two opposite branches comes forth a fleshy spike, a foot long, unequally cylindrical, stiff and green; the flowers, thick set round it, blow in succession, beginning at the bottom, very few together, violet coloured, with the throat and long slender incurved tube white; anther sulphur-coloured; after the corolla is fallen the style stands out of the spike. After each flower follows in a greenish brown calyx or husk, one seed or rather husk, something like wheat in shape and colour, only smaller, and easily divisible into two, both being close covered with the same membrane; they are in a cavity on the side of the spike, and are covered with three sharp, brownish, membranous leaves. This plant is much used in clysters in the belly-ache, and in poultices with onions for the dropsy, as also the decoction. It is used in ulcers beaten and laid on as a poultice.—*Sloane and Jacquin*. The expressed juice of the plant, dose one or two table spoonfuls, a cooling purge for children in fevers and worms. The vervain is likewise a remedy of particular note in sundry negro maladies. *Sloane* says, that a decoction of it with spikenard (*ballota suaveolens*) cures dropsies. *Hughes* says that vervain is a powerful deobstruent; that a table-spoonful of the juice, for four successive mornings, is more effectual in bringing on the catamenia than any other medicine.—*Med. Ass.* This plant is poisonous to sheep. Its virtues as a purifier of the blood are well known, even when used as tea. The expressed juice given with salt is an excellent purge; and infused in rum is said to drive out the yaws, and other impurities of the blood*; and, being of a purgative quality, prevents the bad effects on the stomach, which the use of any bitter, too long continued, is apt to produce. Its eruptive quality is much quickened by adding a little flour of brimstone to it. Vervain and ground ivy tea are often beneficial in hectic fever.

We have several sorts of these plants. One sort is exactly like that in England; it keepeth green all the year round. This sort is well known by most or all the inhabitants of America: The Indian and negro doctors perform great cures with it in dropsies, especially those in woman, occasioned by obstructions of the menstrual discharge, and that by only giving the juice of the plant. It is a powerful remedy against worms, as was evident by a gentlewoman in America, who was in a lingering consumptive condition for some time, and the occasion of it could not be found out by the physicians: Her lungs were good, and so was her appetite, but she still wasted, and was always complaining; at last, a skilful Indian gave her the juice of this plant, mixed with some sugar, by the use of which she voided, in a few days, a thick worm, above twelve inches long, hairy, and forked at the tail, after which she soon recovered, and was perfectly well. The same person recommended this remedy to another gentlewoman in Peru, who, by taking it in the same manner, voided many small long worms, and among the rest, one very long and flat, like unto a long white girdle; after which she also became well. It is almost certain, that the death of most children in America is occasioned by worms, entirely owing to their fruit, which is very apt to breed them: This might be often prevented, by taking the juice of this plant, with contrayerva infused in wine; which would also prevent the fever that is occasioned by them. The ancients attributed many virtues to vervain: It is a great cephalic, and vulnerary in the distemper of the eyes and breast, in obstructions of the liver and spleen; it makes an excellent

* If a sore has the appearance of proceeding from the yaws, it is said that by dressing it with the leaves of this plant, which gives considerable pain at first, it may be discovered; for when the pain has subsided, if it proceed from the yaws the sore will be of a whitish colour, but if not, it will appear red.

lent gargarism for diseases of the throat, and is good against piles and falling-down of the *anus*.

To take away the hardness of the spleen, bruise vervain with the white of an egg and barley-meal or wheat-flour; make it into a cataplasm, and apply it to the part.—Barham, p. 199.

2. PRISMATICA. PRISMATIC.

Verbena minima chamædryos folio—Sloane, v. 1, p. 172, t. 107, f. 2,
Procumbens ramosa, foliis majoribus, spicis longissimis lateralibus.
Browne, p. 116, v. 2.

Two stamened, spikes loose; calyxes alternate prismatic, truncate, awned, leaves ovate-obtuse.

Stem and branches round, smooth, and armed with straight, scattered, black, spines; the leaves are bi-pinnate, often of four pairs, sometimes five or three, with an uncertain number of pinnules, twelve, more or less; they are linear-oblong, sharpish, smooth, sub-sessile, and small; the racemes are lax, terminal, and axillary; about half a foot long; with the proper footstalks about two inches long, spreading, and at the tips collecting the flowers, which are of a pale yellow, (Sloane says blue?) into a roundish head; they are sessile and of a fragrant smell.—Jacquin.

3. LAPPULACEA. BURRY.

Scorodonia floribus spicatis purpurascens pentapetaloides, semine unico, majori, echinato.—Sloane, v. 1, p. 174, t. 110, f. 1. *Foliis cordato-ovatis, floribus spicatis, calicibus inflatis, seminibus echinatis*.—Browne, p. 116, v. 5.

Four stamened, fructing calyxes roundish, inflated, seeds echinate.

Stem herbaceous, a foot high, erect, somewhat branched, brittle, quadrangular, hollow, more contracted at the base of the petioles, striated, pubescent. Leaves opposite and decussated, ovate, acute, serrate, nerved, hispid, on four-cornered pubescent petioles. Racemes long, loose, composed of scattered flowers, directed one way, of a very pale blue colour, on short pedicels, having minute bractes under them; calyx equal, hispid; corolla almost equal; tube twice as long as the calyx, segments of the border acute, three superior a little distinct, two inferior; germ ovate, style short, stigma globular; capsule four-cornered, spiny at the corners, ovate at the base, bi-partite, four-celled, covered with the inflated calyx. Seeds four oblong.—Swartz. The obtuse stigma is reflected; each of the seeds is two celled, and contains two kernels.—Jacquin. This plant is cally *Styptic* or *Velvet-Bur*, and is a fine vulnerary and sub-astringent, commonly applied to bleeding wounds in either men or cattle. It is thought to be so powerful a styptic or astringent as to stop the hemorrhage even when some of the more considerable arteries are cut; and may be deservedly considered as an excellent application in all manner of sores where the habit is relaxed.

4. STOECHADIFOLIA. LAVENDER-LEAVED.

Subfruticosa reclinata, foliis angustis serrato-dentatis, pedunculis longis solitariis, floribus conglobatis.—Browne, p. 116, V. 4, t. 3, f. 1,

Two stamened, spikes ovate, leaves lanceolate-serrate, plaited, stem shrubby.

This rises with a shrubby branching stalk five or six feet high; leaves opposite on short

short footstalks, lanceolate, two inches long, and half an inch broad, serrate, the teeth of the jags coming from the point of the fold or plait; flowers on long naked stalks from the axils, blue, and collected in oval-heads. Browne says it grows about the Ferry and lower lands of St. Catherine, that it is biennial or triennial, and stretches by a slender woody stalk five or six feet, and is furnished with a great number of oblong, serrated and veined leaves, adorned with a fine down below.

5. NODIFLORA. KNOT-FLOWERING.

Verbena nodiflora incana curassavica latifolia.—Sloane, v. 2, p. 187.

Nodiflora repens foliis obovatis superne crenatis, pedunculis longis solitariis, floribus conglobatis.—Browne, p. 116, V. 3.

Four stamened, spikes conical-headed, leaves wedge-shaped, toothed; stem creeping.

Roots simple, filiform. Stems herbaceous, creeping, ascending, from three inches to a foot in length, sub-divided, roundish, marked with lines, smooth; leaves opposite and decussated, on short petioles, cuneate-obovate, serrate-toothed, nerved, thickish, smooth on both sides, having pores underneath. Peduncles solitary, terminating, erect, angular; spike terminating, roundish, composed of small whitish or rose-coloured flowers, separated by bractes, which are sessile, imbricate, square, acuminate, concave, coloured; calyx compressed a little, two-toothed, teeth erect, keeled, ciliate at the back; tube of the corolla longer than the calyx, but scarcely curved in; border slightly five-cleft; the upper segment emarginate, almost upright, shorter; the anterior ones equal, spreading; the middle one three-notched; anthers twin, yellow; germ two-grooved; style short, thick; stigma sub-capitate, green; seeds two, roundish, flatter on one side, covered by a membrane, forming a sort of thin capsule.—Swartz. Brown calls it the round-leaved creeping vervain, common in the low moist lands of Jamaica, and easily known by its obtuse crenated leaves and round-headed spikes.

6. URTICIFOLIA. NETTLE-LEAVED.

Hirsuta, foliis ovato-acuminatis atque serratis, spicis tenuissimis plurimis, caliculis subadnatis.—Browne, p. 117, V. 6.

Four stamened, spikes filiform paniced; leaves undivided, ovate-serrate, acute, petioled.

Stems four-cornered, about three feet high; leaves three inches long, and an inch broad in the middle, ending in acute points, serrate, and placed by pairs; panicles terminating, long, slender, composed of small white flowers, ranged loosely. Browne calls it the hairy vervain with slender spikes growing pretty common in St. Mary's, but rare in other parts of the island, though he met with some specimens about the Ferry. It thrives best in a cool and rich soil.

7. GLOBIFLORA. GLOBULAR-FLOWERED.

Nepeta maxima, flore albo, spica habitiori.—Sloane, v. 1, p. 173, t. 108, f. 1. *Procerior; foliis ovato-acuminatis, serratis; spicis majoribus, compositis, terminalibus; spicillis geminatis, unoversu floridis*.—Browne, p. 259. Galleopsis, 2.

Four stamened, spikes in globular heads, leaves lanceolate, crenate, wrinkled, rugged, stem shrubby.

Stem

Stem suffrutescent or herbaceous, generally five or six feet high, but varying in height; four-cornered, even, brachiate, scarcely fragrant; leaves petioled, cordate, veined, naked, serrate; spikes simple or manifold, terminating, directed one way, interrupted, scarcely leafy; composed of peduncled fastigiate whorls, supported by several bristle-shaped bractes, the length of the flowers, which grow very thick together, curiously disposed on the smallest slips of the branched tops; they are whitish, and all the parts are very small; the neck of the calyx and the filaments are commonly covered with down. The corolla is scarcely larger than the calyx, the border is five-cleft, four of the clefts equal, sharp, spreading, the fifth or lip purplish and roundish; stamens the length of the corolla and distant, style purplish, stigmas simple; seeds roundish, black, glossy. Spikes very odorous, like those of white Horehound. It is called *Wild Spikenard*, and common in all the low lands and dry savannas about Kingston and Spanish-Town.—*Swartz* and *Browne*. This is the *nepeta pectinata* of *Swartz* and has also been made a species of *Bystropogon*.

No English Name.

VIBURNUM.

CL. 5, OR. 3.—*Pentandria trigynia*, NAT. OR.—*Dumosa*.

GEN. CHAR.—Calyx a five-parted superior perianth; corolla one-petaled, five-cleft, bell-shaped; stamens awl-shaped filaments with roundish anthers; the pistil has an inferior roundish germ, no style but a turbinate gland, and three stigmas; the pericarp is a roundish one-celled, one-seeded berry; seed bony and roundish. *Swartz* discovered one species in Jamaica.

VILLOSUM.

HOARY-VILLOSE.

Leaves quite entire, ovate, hoary-villose beneath.

This shrub is a fathom in height with an ash-coloured bark. Branches round, hoary; leaves petioled, opposite, acute, smoothish above, but hoary-villose beneath. Petioles of a middling length, four-sided, channelled, hoary; the hoariness consisting of stellate villose hairs heaped together. Cymes terminating, compound, six-rayed, sub-divided by threes. Common peduncles length of the leaves, solitary, erect, hoary; rays or partial peduncles an inch long, angular, three-cornered; pedicels one-flowered on the third sub-division. Calyx ferruginous-villose; corolla whitish, with roundish spreading segments; filament longer than the corolla; germ villose; berry ovate, oblique, crowned by the calyx at the side; seed oblique—are there not two abortive? Native of Jamaica on the mountains in the southern part, flowering in autumn.—*Swartz*.

VINE—See GRAPE-VINE.

VINE-SORREL.

VINE-SORREL.

CISSUS.

CL. 4, OR. 1.—*Tetrandria monogynia*.NAT. OR.—*Hederaceæ*.GEN. CHAR.—*See* Bastard Bryony, v. 1, p. 56.

ACIDA. ACID.

Bryonia alba triphylla, geniculata, foliis crassis, acidis.—Sloane, v. 1, p. 233, t. 142, f. 5, 6.—*Triphylla, scandens et claviculata, foliis crassis serratis*.—Browne, p. 147. Irsiola.

Leaves ternate ob-ovate, smooth, fleshy, gashed.

Stem scandent, flexuose, round, tinged with purple, succulent, jointed; branches short; leaves petioled alternate; leaflets sessile, cuneate-obovate, gashed at the end, thick, nerveless, deep green. Tendrils at the joints of the stem, long, filiform, strict, others terminating, very long. Umbels five-cleft; umbelllets five-flowered; the flowers pedicelled, and under the pedicels little bractes; calyx surrounding the germ, pitcher-shaped, obtusely four-toothed; corolla four-parted, the parts reflex and deciduous; germ truncate; berry black, surrounded by the calyx. Native of Jamaica in woods near the coast. The whole plant is acid.—*Swartz*. Every joint of the stem makes an obtuse angle with that next to it. It grows near river sides, and flowers in May, climbing on trees or any thing near it.—*Sloane*.

This with its clavicles lays hold of any thing that it is near, climbing over palisadoes, so thick that it cannot be seen through, and upon walls, covering them so that the wall cannot be seen, and keeps green all the year round for many years without decaying. The leaf is thick and juicy, as *orpinant*, or house-leek, but much lacerated and divided, so that one leaf looks like three or four, a little serrated on the sides, and hath a very sour or sharp taste, like sorrel, which some make use of for sauce as common sorrel, but it is slimy, and leaves a little heat upon the palate. It bears a round berry, like the brionies, first green, and then very black; when ripe, it hath sometimes a great matted bunch amongst it like dodder, as thick and as big as a man's head; and when it seems to be withered or dried, which this dodder substance is, at one time of the year, if you handle or squeeze it, there will come out a light black substance like lamp-black, which will stick so close to the skin as not easily to be washed off. I believe this might be of use for staining, colouring, or dying, if rightly understood.—*Barham*, p. 175.

VIOLETS—*See* PSYCHOTRIA.

VIRGIN'S-BOWER.

CLEMATIS.

CL. 13, OR. 7.—*Polyandria polygynia*.NAT. OR.—*Multisiliquæ*.

GEN. CHAR.—Calyx, none; corolla four oblong lax-petals; stamens very many subulate filaments, shorter than the corolla; anthers growing to the side of the filaments; the pistil has very many germs, roundish, compressed, ending in subulate styles, longer than the stamens; stigmas simple; no pericarp; receptacle headed small; seeds very many, roundish, compressed, furnished with the style, in various forms. One species is a native of Jamaica.

DIOICA

DIOICA. TWO-HOUSE.

Clematitis prima sive sylvestris latifolia.—Sloane, v. 1, p. 199, t. 128, f. 1.—*Scandens, foliis quinquenerviis ovatis nitidis pinnato-ternatis*. Browne, p. 255.

Leaves pinnate, leaflets cordate, climbing.

This has slender, tough, climbing stalks, by which it rises to a considerable height; leaves trifoliate, coming out at each side of the stalk; the leaflets are large, ovate, and entire, having three or five longitudinal nerves. The peduncles are produced at the same joints, close to the petioles, one on each side; these are long, naked, and grow horizontally, extending beyond the leaves before they divide and branch; then there come out three or four pairs of small foot-stalks from the large one, each of which divides again into three smaller, each supporting a single flower; the lower pair of these is extended four or five inches, the others gradually diminish to the top, so that they form a pyramidal thyse of flowers; these are white, and are composed of four narrow petals, which are reflected, but the stamens all stand erect. Loureiro says there are eighty seeds disposed in a head; they are obtusely three-cornered and compressed, with a very long tail, fringed with many white hairs. This plant grows in many parts of Jamaica, and commonly called *Pudding Withe*, or *Travellers Joy*. The stalks are generally used for withes in tying rails, &c. Sloane says the root heated in water and mixed with wine, diluted with sea-water, purges hydropic people; and that the juice and flowers beaten and rubbed on the skin takes out spots.

No English Name.

UNIOLA.

CL. 3, OR. 2.—*Diandria digynia*. NAT. OR.—*Graminæ*.

This derives its name from the union of the glumes.

GEN. CHAR.—Calyx a many flowered, many-valved, glume; corolla two-valved; stamens three-capillary filaments, with oblong anthers; the pistil has a conical germ, two simple styles, and pubescent stigmas; no pericarp, the corolla incloses the seed, which is one, ovate-oblong.

SPICATA. SPIKED.

Panicula spicillis longioribus et tenuioribus distiche floriferis referta.—Browne, p. 136.

Sub-spiked, leaves rolled in, rigid.

Culm a span high with alternate rigid leaves, rolled in and mucronate. Panicle very small, and squeezed so close that there is scarcely any sign of pedicels, all directed one way; calyx and glumes keeled, with four florets.—*Linneus*. This plant is common in the low-lands about the Angels, rising generally twelve or fourteen inches high; it is remarkable for the length and slenderness of its delicate flower spikes; the leaves of the cup are very small, and stand in an alternate and distinct order upon the common supporters.—*Browne*. Browne also mentions another species, which he calls the larger long penciled *Uniola*, sometimes met with in the hills above Bull-Bay, rising three feet, and furnished with many flower-spikes for more than half its length, these are

are pretty thick, rise one above the other, and seldom exceed an inch and a half in length, having all the flowers on the outside of them.

No English Name.

VOLKAMERIA

CL. 14, OR. 2.—*Didynamia angiospermia*. NAT. OR.—*Personatæ*.

This was so named in memory of John George Volkamer, physician at Nuremberg.

GEN. CHAR.—Calyx a one-leaved five-cleft perianth; corolla monopetalous, ringent, five-parted, segments to one side; stamens four filiform filaments, with simple anthers; the pistil has a four-cornered germ, a filiform style, and bifid stigma; the pericarp, a roundish two celled, four-grooved drupe (berry); seed a solitary nut, two-celled two grooved. One species is a native of Jamaica.

ACULEATA. PRICKLY.

Paliuro affinis, ligustrifolia spinosa, flore monopetalo difformi, fructu sicco subrotundo.—Sloane, v. 2, p. 25, t. 166, f. 2, 3. *Fruticosum, spinosum; foliis inferioribus confertis, superioribus oppositis; pedunculis tripartitis, trifloris, alaribus*.—Browne, p. 262, t. 30, f. 2, *Clerodendrum*.

Leaves oblong, acute, quite entire; spines from the rudiments of the petioles.

This shrub rises from six to twelve feet, frequently throwing up several stems, which, from their pliability bend downwards; it is common in Jamaica, growing in gravelly soils. The bark is whitish grey. Towards the ends of the branches are many short crooked prickles, opposite, at half an inch distance; the leaves are also opposite, two inches and a half long, and half an inch broad in the middle, on half inch-long petioles. The flowers come out from the sides of the stalk towards the ends of the twigs on inch-long peduncles, several together, umbel fashion, not unlike the flower of the Jasmine, white, with a curved tube, and purple stamens. The flower drops off the style, and is succeeded by a berry, which Gærtner describes as roundish, juiceless, swelling into four little bumps at top, four-grooved, shining, consisting of two parts, and opening two ways. Stones (or nuts) two, cartilaginous, ob-cordate, convex on one side, marked with a groove along the middle, flat on the other, smoothish, two-celled; one seed in each, ovate-oblong, convex on one side, somewhat angular on the other, fastened to the base of the cells.

Bladder-Wort.

UTRICULARIA.

CL. 2, OR. 1.—*Diandria monogynia*. NAT. OR.—*Corydales*.

So named from the Latin word for a little bottle, on account of the small appendages to the root.

GEN. CHAR.—Calyx a two-leaved perianth; corolla one-petaled, ringent; nectary horned; stamens two very short curved in filaments, with small cohering anthers; the pistil has a globular germ, a filiform style, and conical stigma; the pericarp a globular capsule, one-celled; seeds numerous. One species is a native of Jamaica.

OBTUSA

OBTUSA. BLUNT.

Foliis capillaceis ramosis, scapo assurgenti nudo superne ramoso.—
Browne, p. 119.

Nectary bent in, obtuse, sub-emarginate.

Roots capillary, branched, whitish; leaves floating, furnished with small ovate bladders; scape from two to three inches long, filiform, erect, simple, sometimes divided at top, naked, smooth; flowers terminating, alternate, three or four, small, yellow, on long one-flowered peduncles. Tube of the corolla very short, cylindrical; upper lip ovate, convex, entire; lower a little smaller, ovate, the orifice closed; nectary scarcely longer than the lip, conical; palate orange streaked with purple: filaments inserted in the aperture of the tube, sabre-shaped; anthers roundish, growing to the inner side of the filaments, one-celled; germ roundish; style very short and thick; stigma funnel-form, oblique, one-lipped; capsule roundish; seeds compressed, membranaceous at the side. Native of Jamaica in marshy rivulets, flowering the whole summer.—Swartz. Browne says this elegant little plant is very common in all the stagnated waters about the Ferry, and in the parish of St. George, seldom rising above four inches, and bearing a beautiful succession of small yellowish flowers.

WAKE-ROBINS.

ARUM.

CL. 20, OR. 9.—*Gynandria polyandria.* NAT. OR.—*Piperitæ.*

GEN. CHAR.—See *Cocoes*, v. 1, p. 211. Besides those species described under their respective names, the following are natives of Jamaica.

1. MACRORHIZON. LONG-ROOTED.

Acaule majus sylvestre, radice oblonga fibrata, foliis amplioribus cordatis.—Browne, p. 333, A. 9.

Leaves peltate cordate, repand, two-parted at the base.

The spathe of this species is patent, reflected, the spadix is much longer and entirely covered with flowers, divided into squares, each square containing one flower; each flower consisting of four stamens, which are trigonal, and surrounding one quadrigonal germ. Browne calls it the large wild wake-robin, very common among the rocks, in many parts of Jamaica; the leaves large, and rising immediately from a thick lengthened root.

2. HEDERACEUM. IVY-LEAVED.

Scandens, foliis cordatis, petiolis rotundis.—Browne p. 333, A. 11.

Radicant; leaves cordate, oblong, acuminate; petioles round.

3. LINGULATUM. TONGUE-LEAVED.

Phyllitidi scandenti, affinis minor graminifolia folio oblongo acuminato, foliorum pediculis alis extantibus auctis.—Sloane, v. 1, p. 75, t. 27, f. 2—*Tenue scandens, foliis oblongis, petiolis alatis amplexantibus.*—Browne, p. 333, A. 12.

Creeping; leaves cordate-lanceolate, petioles edged with membranes.

This has a climbing stem, with alternate leaves and clavicles; the leaves are an inch and a half long and half an inch broad on half inch long pedicels, winged, embracing

the stem. Browne calls it the climbing wake-robin with oblong leaves and edged footstalks, only to be met with in the most lonely inland woods; it climbs with great ease, and grows more succulent and luxuriant towards the top.

4. FUNICULACEUM. CORDED.

Arum maximum altissimum scandens arbores, foliis nymphaeae, laciniatis.—Sloane, v. 1, p. 169. *Scandens, foliis majoribus crenato-laciniatis, petiolis simplicibus.*—Browne, p. 331, A. 3.

Climbing, leaves cordate sagittate, sinuate; petioles long, round; stem jointed.

This plant climbs to the top of high trees and sends forth long cords or filaments which hang down to the earth. Browne calls it the large climbing wake-robin with torn leaves.

See COCOES—DUMB-CANE—FIVE-FINGER—INDIAN-KALE.

No English Name.

WALLÉNIA.

CL. 4, OR. 1.—*Tetrandria monogynia.* NAT. OR.

This was so named by Swartz, in honour of Mathew Wallen, Esq. of Jamaica, who was a great lover of botany, and cultivated at his garden in Liguanea mountains, many exotic and indigenous plants. He assisted both Dr. Browne and professor Swartz in their several works.

GEN. CHAR.—Calyx a one leafed four-cleft pericarp, permanent; segments erect, obtuse; corolla one-petaled, tubular; tube cylindrical, erect, longer than the calyx; border four-cleft, segments ovate, obtuse, erect, converging, small: stamens four filaments, from the bottom of the corolla, wider at the base, erect, longer by half than the corolla, (above the border) diverging; anthers ovate, erect: the pistil has an oblong superior germ; an awl-shaped style, shorter than the stamens and corolla, permanent; stigma simple, obtuse; the pericarp a roundish one-celled berry: seed one, roundish, covered with a brittle crust.

LAURIFOLIA. LAUREL-LEAVED.

Bryonia nigra fruticosa, foliis laurinis, floribus, racemosis, speciosis.—Sloane, v. 1, p. 234, t. 145, f. 2.

This is a tree with a trunk from ten to twenty feet high, covered with an even unarmoured bark; branches long; branchlets round, warted by the fallen leaves. Leaves petioled, oblong, acuminate, with a blunt point, entire, slightly nerved, somewhat striated, smooth, and shining; paler underneath, membranaceous, and thickish; petioles short, round, smooth; no stipules. Panicle terminating, spreading; branches alternate, subfastigate, sub-divided; branchlets alternate, sub-terminating; flowers pedicelled, yellow, inodorous; calyx embracing the corolla, permanent, pale-coloured; berry scarlet. The calyx, corolla, genitals, and fruit, have dots or glandular orange-coloured atoms scattered over them. The fruit, when ripe, is sub-acid and aromatic, like the other parts of the fructification; the seed has the flavour of *piperitæ*. It flowers in spring and autumn. There are sometimes male flowers, which are barren, having no pistil.—Swartz. The *Euphorbia pumicea* is generally known in Jamaica by the name Wallénia.—See Spurges.

WALL-FLOWER—See BASTARD-MUSTARD.

WALNUT.

WALNUT, JAMAICA.

JUGLANS.

CL. 21, OR. 7.—*Monoecia Polyandria*. NAT. OR.—*Amentaceæ*.

GEN. CHAR.—Male calyx a cylindrical ament, imbricate, scattered all round, with one-flowered scales turned outwards; no corolla, but a six-parted perianth; filaments eighteen to twenty-four, short, with oval anthers: Female calyx four-cleft superior; corolla one petaled, four-cleft; the pistil has an oval germ, two styles, and two large stigmas: pericarp a dry drupe with a grooved nucleus: seed a large nut, variously grooved. One species of this genus is a native of Jamaica.

BACCATA. BERRIED.

Nux juglans trifolia, fructu magnitudine nucis moschatæ.—Sloane, v. 2, p. 1, t. 157, f. 1. *Foliis oblongis obtusis pinnato-ternatis, fructibus singularibus baccatis ad alas*.—Browne, p. 346.

Leaflets in threes.

Height twenty feet, stem as thick as the human thigh, with a comely top and a grey bark, having some furrows on it. Leaves terminating, always three together, three inches long, and one inch broad, thin, smooth, brownish green; common petiole reddish, two inches long; petiolules a quarter of an inch in length. Aments axillary, two together, an inch long. The fruit hangs from the branches on peduncles, an inch in length; it is yellowish, oval, as big as a nut-meg, having under a thin mucilaginous pulp a large shell. It grew in the town savanna between Spanish-Town and Two Mile Wood, and on the banks of the Rio-Cobre—Sloane. The Jamaica Walnut is frequent about the Ferry; it is a shrubby tree rising to a considerable height. The outward part of the fruit is soft and pulpy, when ripe; but the hard ligneous shell, and the partitions and lobes of the seeds, as well as the parts of the flower, agree perfectly with the general characters of the genus.

The *regia*, or common Walnut tree, has been long ago introduced, but does not thrive well in Jamaica. The *alba*, or hiccory-nut, and *nigra*, or black walnut, have also been introduced.

No English Name.

WALTHERIA.

CL. 16, OR. 2.—*Monodelphia pentandria*. NAT. OR.—*Columniferae*.

So named in honour of A. F. Walther, professor of medicine at Leipsic.

GEN. CHAR.—Calyx a double perianth, outer lateral, three-leaved, deciduous; corolla five-petaled, petals obcordate, spreading, fastened at bottom to the tube of the filaments; stamens five filaments, united into a tube, free above, spreading, short; anthers ovate; the pistil has an ovate germ, a filiform style, and penciled stigma; the pericarp is an ob-ovate capsule, one-celled, two-valved; seed one, obtuse, wider above. Three species are natives of Jamaica.

1. AMERICANA. AMERICAN.

Fruticosa subhirsuta, foliis oblongo-ovatis serratis, floribus capitatis, pedunculis communibus, longiusculis, singulis folio singulari ornatis.—Browne, p. 276, W. 2.

Leaves oval plaited, bluntly toothed, tomentose, head sessile.

L 1 2

Stem

Stem soft, woody, about two feet high, sending out two or three side branches; leaves alternate, of a pale yellowish-green colour, soft and hairy; flowers collected in a close thick spike at the top of the stem, having soft hairy calyxes, petals connected at their base, small, bright yellow, spreading.

Fruticosa purpurea foliis oblongo-ovatis acutis crenatis floribus singularibus, minoribus pedunculis tenuioribus longiusculis This plant grew very common in the pastures at Longville Park; the stem was slender, purple-black in colour; the leaves were of the form of these of the four o'clock, flowers crenated about their margin in like manner, and placed on very short footstalks. From the bosom of every leaf grew a pedicel not thicker than a horsehair, an inch long, supporting one pentapetalous flower of a deep purple; the petals were expanded, their extremities serrated, from the centre of which arose an erect tube, whose extremity was divided into five filaments towards the top. The cap was simple, cyathiform, semi-pentafid, and the stigma divided into five parts. The taste was insipid, but there was a remarkable roughness impressed upon the tongue, which was not caused by any astringent or binding quality in the leaf, but by certain very short, stiff, bristly hairs wherewith it was covered, discernible only by the microscope; they yielded some slime in chewing. As most plants of this tribe are covered with like bristles in their leaves and flowers, it may induce some inadvertently to mistake that roughness above-mentioned for astringency, but I know of none of the tribe endowed with any such property.—A. R.

2. ANGUSTIFOLIA. NARROW-LEAFED.

Foliis angustis ovato-acuminatis rugosis serratis, floribus confertis ad alas.—Browne, p. 276, W. 1.

Leaves oblong-obtuse, plaited, toothed, hoary, heads subsessile.

Stalks woody, six or seven feet high, dividing into several branches, somewhat hairy; leaves about three and a half inches long and one and a half broad, of a yellowish green colour, having many veins running from the midrib, and standing on long footstalks. Flowers very small, yellow, collected into round clusters, standing upon very short peduncles, close to the axils.

3. INDICA. INDIAN.

Foliis subrotundis undulatis serratis floribus confertis alaribus.—Browne, p. 276, W. 3.

Leaves oval, plaited, bluntly toothed, tomentose, head sessile.

This rises with a shrubby branching stalk to the height of eight or ten feet, and is covered with soft hairs; leaves alternate, petioled, four inches long, and two inches broad in the middle, rounded at both ends, of a yellowish green colour, very hairy and soft, having several longitudinal veins; heads axillary sessile, composed of clusters of very small yellow flowers, which first peep out of their soft yellow calyxes. Browne says all these species are found in the lower hills of Jamaica, where they seldom rise above four or five feet.

WART-HERB—See CAT-CLAWS.

WATER.

WATER-CRESS.

SISYMBRIUM.

CL. 15, OR. 2.—*Tetradynamia siliquosæ*. NAT. OR.—*Siliquosæ*.

GEN. CHAR.—Calyx a four-leaved perianth spreading; corolla four-petaled cruciform, spreading; stamens six-filaments, longer than the calyx, two shorter; anthers simple; the pistil has an oblong germ, scarcely any style, and an obtuse stigma; the pericarp a long silique, incurved, gibbous, round, opening with straightish valves; seeds very many, small.

NASTURTIIUM.

CRESS.

Nasturtium aquaticum vulgare.—Sloane, v. 1, p. 193. *Aquaticum; foliis subrotundis, abrupte pinnatis, basi inequalibus*.—Browne, p. 272.

Siliques declined, leaves pinnate, leaflets cordate roundish.

Roots perennial, consisting of long white fibres, the lowermost fixed in the soil, the rest suspended in water; stems spreading, declining or floating, angular, branched, leafy. Leaves alternate, pinnate, somewhat serrate, the terminating and upper leaflets being the largest; all the leaflets roundish, more or less heart-shaped, smooth, shining, waved or toothed, frequently tinged with a purplish brown hue. Flowers white in a corymb, soon lengthened out into a spike; pods shortish on horizontal pedicels, but the pods of themselves recurved upwards; stigmas nearly sessile. This plant, in all respects the same as the European, is common in all running waters in Jamaica, where it is frequently served up at tables, and is reputed an excellent antiscorbutic. It is supposed to purify the blood, and to open visceral obstructions.

WATER-HYSSOP.

GRATIOLA.

CL. 2, OR. 1.—*Diandria monogynia*. NAT. OR.—*Personatæ*.

GEN. CHAR.—Calyx seven leaved, the two outer leaves patulous; corolla monopetalous, reversed; stamens four awl-shaped filaments, two barren; anthers roundish; the pistil has a conic germ; a straight awl-shaped style, and a two-lipped stigma; the pericarp an ovate-acuminate capsule, two-celled, two-valved; seeds very many, small. Two species have been found in Jamaica.

1. MONNIERIA.

Anagallis cærulea, portulacæ aquaticæ caule et foliis.—Sloane, v. 1, p. 203, t. 129, f. 1. *Minima repens, foliis subrotundis, floribus singularibus alaribus*.—Browne, p. 269, t. 28, f. 3.

Leaves oval, oblong, peduncles one-flowered, stalk creeping.

Root jointed, creeping, with small fibres; stalk herbaceous, inclined to be simple, round, leafy, smooth, somewhat erect, declining at bottom. Leaves sub-sessile, opposite, oblong, or ob-ovate, entire, smooth, nerveless, somewhat succulent. Peduncles longer than the leaves, filiform, solitary, axillary, one-flowered; calyx seven-leaved, the three outer leaflets sub-cordate, acuminate, converging; the two inner linear, acute, pale, when the corolla falls embracing the germ, the two outmost lower, lanceolate spreading. Corolla blue, inclined to bell-shape, a little flattened, five-cleft, the

the divisions nearly equal; the three upper ovate, spreading; the two lower converging, somewhat bent down; filaments two, shorter by half than the other two; anthers ovate, blue.—*Swartz*. This little creeping plant is very common in every oozy spot about the harbour of Kingston, it sticks very close to the earth, and casts a few fibrous slender roots from every joint as it creeps. The whole seldom exceeds seven or eight inches in length, growing generally in beds, and spread thick on the ground, throwing out a few simple side branches from space to space, which give it a beautiful appearance, when in flower, and makes it exceedingly remarkable. It has a bitterish taste, and thrives best in a low moist soil.—*Browne*. It was named *monierria* in honour of dr. Monier.

2. REPENS. CREEPING

Leaves ovate, stem creeping, calyx five-leaved, style bifid.—*Swartz*.

WATER-LEMON.

PASSIFLORA.

CL. 20, OR. 4—*Gynandria pentandria*.

NAT. OR.—*Cucurbitaceæ*.

GEN. CHAR.—See Bullhoof, v. 1, p. 123.

MALIFORMIS.

APPLE-FORM.

Foliis cordatis productis, petiolis biglandulis, fructu sphærico, pericarpio duro.—*Browne*, p. 328, P. 4.

Leaves cordate-oblong, quite entire, petioles biglandular, involucre quite entire.

Stem thick, triangular, by slender tendrils thrown out at every joint rising to the height of fifteen or twenty feet. At each joint is one leaf, six inches long and four broad in the middle, of a lively green, and thin texture, having a strong midrib, whence arise several small nerves, diverging to the sides, and curving up towards the top. Petioles pretty long, having two small glands in the middle. Two large stipules encompass the petioles, peduncles, and tendrils, at the base; peduncles pretty long, having also two small glands in the middle. The cover of the flower is composed of three soft velvety leaves, of a pale red, with some stripes of a lively red colour; the petals are white and the rays are blue. The flowers being large make a fine appearance, but are of short duration, there is however a succession of them for sometime. Fruit roundish, the size of a large apple, yellow when ripe, having a thicker rind than any of the other species, inclosing a sweetish pulp, in which are lodged many oblong brownish-black seeds, a little rough to the touch.—*Martyn's Dictionary*. *Browne* says it grows frequent in the woods of Jamaica and supplies the wild hogs with a great part of their food.

See BULL-HOOF—GRANADILLA—LOVE IN A MIST—PASSION-FLOWERS.

WATER-LILLY.

NYMPHÆA.

CL. 13, OR. 1.—*Polyandria monogynia*.

NAT. OR.—*Succulentæ*.

The generic name was given from its growing in water, which the poets feign to be the residence of nymphs.

GEN.

GEN. CHAR.—Calyx an inferior perianth, four, five, or six, leaved, large, coloured above, permanent; corolla numerous petals, placed on the side of the germ, in more than one row; stamens numerous filaments, flat, curved, blunt, short; anthers oblong, fastened to the margin of the filaments; the pistil has a germ large, ovate, no style; stigma orbiculate, flat, peltate sessile, rayed, crenate at the edge, permanent; the pericarp a hard, ovate, fleshy, rude, berry, narrowed at the neck, crowned at the top, many-celled, full of pulp. Three species are natives of Jamaica.

1. LOTUS.

Nymphaea Indica flore candido folio in ambitu serrato.—Sloane, v. 1, p. 252. *Foliis amplioribus profunde crenatis, subtus areolatis.*—Browne, p. 243, N. 1.

Leaves cordate toothed.

Root tuberous; leaves alternate, on long petioles half sheathing below, floating; peduncles long, naked like scapes, one flowered; flowers large, emerging. This plant is very common in the ponds, lagoons, and rivers, about the Ferry, and is the same as the East India plant, of the seeds of which Herodotus relates that the Egyptians made bread; by grinding and drying them in the sun. The flowers are large and beautiful, sustained each by a simple long cylindric footstalk. All parts of the plant may be used for the same purposes for which the common water lily is recommended; for they are excellent coolers; and useful in inflammations, burnings, or ulcers, as outward applications; internally, in diarrhæas, gonorrhœas, and dysenteries. The plants of this genus put on very different appearances, the following characters are taken from a plant of this species:

Perianth four ovate leaves; corolla *twenty-four* petals of a lanceolate form, placed upon the sides of the germs in six rows or series, one above another, by fours at equidistant spaces, in a verticillate order, gradually decreasing inside upwards, the upper rows placed cross-wise or opposite to the inter-spaces of that immediately beneath it. The germ large and sub-globose; no style; stigmata twenty-five, sessile, linear, and forming a radiate shield, crenated on its edge or margin; from each crena arises a short compressed uncurvated filament with a clavated summit, the stamens were eighty-two, of a flattened linear form, and unequal; the exterior ones being the largest, equalling the length of the uppermost row of petals; they were placed in a furrow formed between the uppermost row of petals and the margins of the stigmas. The fruit was a large globose capsule, univalvular, divided into as many cells as it had stigmas, replete with small ovate red seeds.

2. ALBA. WHITE.

Nymphaea alba major.—Sloane, v. 1, p. 252.

Leaves cordate, quite entire, lobes imbricate, rounded; calyx four-leaved.

This species grows very commonly in Jamaica in ditches and ponds; the corolla has six or eight petals; the stamens are linear; one which had thirteen stigmas had fifty stamens; and one that had seventeen stigmas had seventy-three stamens; placed in rows upon the germ, surrounding the stigmas; the exterior ones, which are also the longest, arise farther from the stigmas, the other rows decrease in length as they ascend, so that the uppermost row, with respect to its origin, is by much the shortest; the anthers are sagittated and line as it were the inside of the upper and narrowest part of the

the stamens more than half way down. The stamens of these plants arising from the upper part of the germ seem to make them approach to the class gynandria, and the order polyandria, from the number of their stigmas : the following species especially :

3. NELUMBO.

Foliis orbiculatis, peltatis, subtus radiatis ; fructu obverse conico, seminibus majoribus nidulantibus.—Browne, p. 343, N. 2.

Leaves peltate, entire all round.

Root horizontal, long, creeping, consisting of joints linked together, ovate-oblong, white, fleshy, esculent, tubular within ; leaves exactly peltate, with a cavity in the centre above, and dichotomous veins springing from the same centre, orbiculate with a point on each side, a little waved, thin, paler underneath, smooth, of different sizes, from four to twelve inches long (or more). Petioles erect, very straight, round, hispid, or muricated, thicker below, attenuated above. Peduncles the thickness of a finger below, attenuated above, spongy, muricated, one flowered. Flower as large as the palm of the hand (frequently much larger) purple : Calyx four-leaved, leaflets concave, spreading, deciduous, corolla fifteen petals, or more, ovate sub-acute, concave, many nerved on the outside, spreading : Stamens sixty or more, shorter than the corolla ; anthers linear, white, very long, placed on the receptacle ; germ turbinate, superior ; styles as many as there are seeds, thick and very short ; the stigmas thicker. Pericarp turbinate, truncate, grooved corticose, opening at top, cells one seeded, as far as thirty : Seeds ovate, half an inch long, white, hardish, eatable, with a thin smooth, black, rind.—*Thunberg* and *Loureiro*, What is commonly named the pericarp *Gærtner* calls the common receptacle. In germination it puts forth one leaf only from the nut and does not produce a second till the first is entirely unfolded above water.

This plant seems to be improperly made a species of *nymphæa*, and perhaps ought to make a genus itself ; for the cup of *nymphæa* is permanent, that of *nelumbo* deciduous ; the stamens of the former proceed from the sides of the germ, those of the latter from the receptacle ; and every seed of the *nelumbo* has an elongated style, while the germ of the *nymphæa* has a stellated stigma, and is gynandrous, whereas the *nelumbo* is evidently polyandrous.

This plant is a native of both the East and West-Indies. In the East it has long been considered sacred, and held in such veneration by the Hindoos and Indians, that they paint their Gods as sitting upon it, and adorn their altars and temples with it. Sir William Jones mentions a native of Nepal who made prostrations before this plant, on entering his study, where one of its beautiful flowers lay for examination.

There are several sorts of water lilies, the roots of which are said to be an antidote against the biting of the snake called *cobra capilla*, or hooded snake. The leaves, stalks, and flowers, of the other water lilies are good against inflammations, hot pains, burnings, or scaldings ; the oil, anointed on the temples, causes rest, the seeds and roots are useful in dysenteries, diarrhoeas, gonorrhœas, and weakness in women. The Egyptians make their *scarbet nufar** of it ; (the lotus) the Turks make an infusion of the flowers in water, over night, to drink the next morning, to keep them from the headache. A syrup of the flowers or conserve is good against spitting of blood ; and the powder

* Of sugar dissolved, from which the water is evaporated till it candies, then they put to it such a small quantity of the depurated juice of this plant as not to hinder its concretion.

powder of the seed, given in conserve of hips, does the same, and is good against inward heats. Sloane says it makes people frigid, and extinguishes venery very much. *Barham*, p. 206.

WATER-MELON.

CUCURBITA.

CL. 21, OR. 1.—*Monœcia syngenesia*.

NAT. OR.—*Cucurbitaceæ*.

GEN. CHAR.—See Gourd, p. 332.

CITRULLUS.

Anguria prima, citrullus dicta.—Sloane, v. 1, p. 226.

Leaves many-parted.

Stem round, striated, long, branched, hairy, procumbent, diffused, with lateral bifid tendrils: * flowers yellow, on short, solitary, lateral, peduncles; fruit large, smooth, round or oblong, a foot or more in length, pulp watery, sweet pale, or reddish; seeds black or rufous. The fruit varies much in form and colour, and is much cultivated in Jamaica on account of its cooling and agreeable nature. The seeds, like those of the muskmelon, are used in cooling and nutritive emulsions.

See GOURD—PUMKIN—SQUASH.

WATER-PLANTAIN.

PONTEDERIA.

CL. 6, OR. 1.—*Hexandria monogynia*.

NAT. OR.—*Ensatæ*.

So named in memory of Julius Pontedera, professor of botany at Padua.

GEN. CHAR.—Calyx a spathe; corolla one-petaled, six-cleft, two-lipped; stamens three inserted at the top, three into the tube of the corolla; anthers erect, oblong; the pistil has an oblong germ, a simple style, and thickish stigma; the pericarp a fleshy capsule, three-celled; seeds roundish, very many. Two species are natives of Jamaica.

1. AZUREA. BLUE.

Aquatica caulescens, foliis majoribus orbiculatis nitidis, floribus spicatis ad alas.—Brown, p. 195.

Leaves roundish-elliptic, thickened at the base, and petioles, flowers in spikes.

This is a stemless-aquatic plant. Root jointed, with long capillary whitish fibres at the joints. Leaves petioled, radical, half a foot long, roundish with the base drawn out into a thickened petiole, and an acuminate top, entire, the margin waved, striated, veinless, nerveless, smooth: Petioles thickened, suberous, longer than the leaves,

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round,

* In a paper lately read before the Royal Society, by Mr. S. A. Knight, it is stated that creeping plants, and tendrils of vines, invariably recede from the stronger light, and attach themselves to objects in the shade; or, if no other object presents itself, to the dark side of their parent stems. Hence the writer concludes that the action of light on the tendrils contracts the vessels on the sides exposed to it, and occasions not only the spiral convolutions, but also that tendency to fix on obscured or shaded objects. On this principle the curious instinct-like motions of young tendrils are all accounted for.

round, smooth, sheathing at the base, producing the scape in the middle from a lateral sheath. Scape short, terminating by a loose, spreading, many-flowered, spike. Flowers alternate, approximating; under which one common ovate-cordate, blunt, open, spathe. Corolla salver-shaped six-cleft, after flowering sexpartite, almost regular, blue; three of the segments exterior, dotted, somewhat rough-haired; the middle one superior, wider, ovate; filaments six; anthers incumbent, hastate at the base; germ three-sided; style longer than the stamens; stigma thickened.—*Swartz*. The round-leaved water-plantain grows in most of the lagoons and rivers about the Ferry, the leaves are roundish, thick and smooth; the flowers moderately large; and the stalk about an inch in diameter; it grows very luxuriantly, and throws up its flower-spike a good way beyond the surface of the water.—*Browne*.

2. LIMOSA. MUDDY.

Nymphaea affinis palustris, plantaginis aquaticae folio, flore hexapetalo stellari caeruleo.—*Sloane*, v. 1, p. 253, t. 149, f. 1.

Leaves cordate-ovate, scapes lateral, one-flowered, flowers triandrous.

This is only a few inches in height. Roots long, jointed, with whitish capillary aggregate fibres at the joints; leaves radical, emarginate at the base, but scarcely cordate, entire, smooth, nerveless, an inch in length. Petioles sheathing at the base, longer than the leaves, fistular, round, smooth; from which issues, in a cleft or lateral sheath, a scape which is an inch long, round, naked, one-flowered. Spathe lanceolate, one-valved, one-flowered; corolla blue; tube narrow, cylindrical, inclosed within the spathe; border equal, six-parted; segments lanceolate; the three upper ones all of the same blue colour; the three inner ones having a yellow spot at the base near the throat; filaments three, inserted into the throat of the tube, short; anthers sagittate, erect, blue, above the tube; germ oblong, cylindrical; style erect, the length of the tube and the stamens; stigmas six, linear, villose; capsule elongated, round, acuminate, within the spathe, three-celled, three-valved, three grooved; seeds very many, small, roundish, brown. This species is very distinct by its one-flowered scape and spathe. Native of Jamaica and Hispaniola, on the muddy banks of rivers.—*Swartz*. It grows also in Savannas where the water has stood.

WATER-PLANTAIN, GREAT.

ALISMA.

CL. 6, OR. 5.—*Hexandria polygynia*. NAT. OR.—*Tripetaloideæ*.

GEN. CHAR.—Calyx a three-leaved perianth, leaflets ovate, concave, permanent; corolla three-petaled; petals roundish, large, flat, very spreading; stamens awl-shaped filaments shorter than the corolla, with roundish anthers; the pistil has more than five germs, styles simple, stigmas obtuse; pericarp compressed capsules: seeds solitary, small.

CORDIFOLIA. HEART-LEAVED.

Foliis lunulato sagittatis venosis, scapo assurgenti ramoso, angulato sulcato; ramulis ternatis, verticillato-verticillatis.—*Browne*, p. 204.

Leaves heart-shaped, obtuse, flowers twelve-stamened, capsule hook-pointed.

This plant grows very common in all the stagnated waters about the Ferry, and rises generally

generally to the height of two or three feet above the root; all the flowers are hermaphrodite, and furnished each with twelve filaments, and a numerous family of germs or germens. The whole plant has so much the appearance of an arrow-head, that it seems to have exchanged flowers with that plant.—*Browne*.

WATER-PURSLANE.

PEPLIS.

CL. 6, OR. 1.—*Hexandria monogynia*. NAT. OR.—*Calycanthemæ*.

GEN. CHAR.—Calyx bell-shaped, with a twelve-cleft mouth; corolla six-petals, inserted into the calyx; stamens awl-shaped filaments with roundish anthers; the pistil has an oval germ, a very short style, and orbiculate stigma; the pericarp a two-celled capsule; seeds very many. One species is a native of Jamaica.

TETRANDRIA. FOUR-STAMENED.

Hirta, foliis parvis orbiculatis, floribus singularibus ad alas.—*Browne*, p. 145. *Ammannia*.

This plant is rare in Jamaica, *Browne* found it in the mountains between St. Thomas in the Vale and St. Mary's, seldom rising above four inches. *Swartz* considers that the corolla, fruit, number, and habit, do not admit of its ranging with *peplis*. It seems rather to be a *hedyotis* (see *Farwort*). He thus describes it "The root consists of globular distinct tubers; stem sub-divided, divaricated, round; stipules small, sheathing, acuminate. Leaves sub-sessile, the upper ones in fours, ovate-cordate, subspatulate, entire, somewhat hispid above, smooth beneath. Flowers terminating, peduncled, the size of a pin's head; peduncles short, one-flowered; perianth four or five cleft, superior; segments bifid, so that it seems to be eight or ten-toothed, permanent; corolla one-petaled, ovate, scarcely longer than the calyx, four-parted; segments blunt, upright; filaments four, awl-shaped, shorter than the corolla; anthers ovate, small, concealed by the divisions of the corolla; germ twin; style cloven almost to the base; stigmas awl-shaped; capsule twin, globular, two-celled, surrounded and crowned by the calyx, opening at top by four valves; seeds two in each cell, orbiculate, covered by the valves. It is an annual plant, native of the West-Indies, in dry shady places at the foot of mountains and trees.—*Swartz*.

WATER-WITHE—See JAMAICA GRAPE.

No English Name.

WEINMANNIA.

CL. 8, OR. 2.—*Octandria digynia*. NAT. OR.—*Saxifragæ*.

So named in honour of J. W. Weinmann, apothecary at Ratisbon.

GEN. CHAR.—Calyx a four-leaved perianth, leaflets ovate, patulous; corolla four equal petals, bigger than the calyx; stamens eight erect short filaments, with roundish anthers; the pistil has a roundish germ; styles two, length of the stamens, with acute stigmas; pericarp an ovate, two-celled, two-beaked, capsule; seeds about eight, roundish. Two species have been found in Jamaica.

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1. GLABRA

1. GLABRA. SMOOTH.

Leaves pinnate, leaflets ob-ovate, crenate, even.

This is a small tree with opposite branches, the last of which are sub-pubescent. Leaves opposite, equally pinnate; the common petiole winged with sub-ovate joints; leaflets eleven or thirteen, small, naked, blunt, opposite, sessile, narrower on the inner side towards the base, having three or four serratures on each side. Stipules ovate, the size of the leaves, deciduous, solitary between the pairs of the petioles. Racemes terminating, solitary, peduncled, longer than the leaves, erect, simple; flowers numerous, white; pedicels one-flowered, several from each point of the peduncle; calyx leaves oblong, white; petals lanceolate, three times as long as the calyx; germ ovate, two-grooved; styles white, filiform; stigmas headed.—*Linæus*. Swartz found it in Jamaica, and remarks that it varies from the stature of a shrub to that of a tree forty feet in height.

2. HIRTA. HAIRY.

Fruticosa foliis subrotundis serratis, per pennas cordato-alatas dispositis; racemis terminalibus; pennis et ramos oppositis.—*Browne*, p. 212.

Leaves pinnate, leaflets ovate, serrate-crenate, beneath and on the racemes hirsute.

This differs from the preceding in the pubescence of most of the parts; in having the joints of the common petioles sub-cordate, not ob-ovate; the capsules oblong and short, not roundish, and longer beaked.—*Swartz*. I met with this elegant little shrub on the top of the Blue Mountains near Coldspring, but in no other part of the island. It rises by a weakly slender stem, and shoots frequently to the height of six or seven feet. The branches are few, slender, and opposite, as well as the ribs, which have always been found beautifully alated or winged between the leaves, but the flowers rise in loose bunches at the extremities of the branches.—*Browne*.

WEST-INDIAN LAUREL.

PRUNUS.

CL. 12, OR. 1.—*Icosandria monogynia*. NAT. OR.—*Pomaceæ*.

GEN. CHAR.—Calyx a one-leafed bell-shaped perianth, five-cleft, deciduous; segments blunt, concave; corolla five-petals, roundish, concave, large, spreading, inserted into the calyx by their claws; stamens twenty to thirty filaments, awl-shaped, almost the length of the corolla, inserted into the calyx; anthers twin, short; the pistil has a superior roundish germ, a filiform style the length of the stamens, and an orbicular stigma; the pericarp a roundish drupe; seed a roundish compressed nut, with sutures a little prominent. Two species are natives of Jamaica.

1. SPHÆROSCARPA. GLOBE-FRUITED.

Myrti folio arbor, foliis latis subrotundis flore albo racemoso.—*Sloane*, v. 2, p. 79, t. 193, f. 1.

Flowers in axillary racemes, leaves ever green without glands, entire, shining, drupes roundish.

Wood

Wood very hard and white, covered with a grey smooth bark; leaves alternate, two inches long, and one and a half broad near the round base; even, shining, with very few apparent veins on the surface, without any indentures on the edges, on a footstalk one-third of an inch in length. Flowers white, in racemes opposite to a leaf.

2. OCCIDENTALIS. WESTERN.

Flowers in lateral racemes; leaves perennial, without glands, oblong, acuminate, entire, smooth on both sides.

WHIN—See FURZE.

WHITE-CEDAR—See WHITE-WOOD.

WHITE-MASTIC—See BASTARD BULLY-TREE.

WEST-INDIA TEA.

CAPRARIA.

CL. 14, OR. 2.—*Didynamia angiospermia*. NAT. OR.—*Personatæ*.

GEN. CHAR. See Goat-Weed, p. 327.

DIFLORA. TWO-FLOWERED.

The specific characters have already been given under the name Goat-weed, where it was omitted to be noticed that this plant had received the name of West India-Tea; as according to Long and Barham, the leaves not only resemble those of Tea, but make an equally agreeable decoction, which is also recommended as an excellent febrifuge. This plant is very common every where in the Savannas, and about the towns. What Barham says of it may not be thought unentertaining. A Frenchman, says he, captain of a ship, affirmed to me, as we were walking about our town of St. Jago de la Vega, and observing this plant growing so plentifully, that it was the same as the tea-plant of China; that he had lived in that part of the world many years, had seen large fields of it, and the manner of cultivating it, and all the difference was, that the Chinese plant was larger, which he ascribed to their care and culture of it; and had no doubt but the Jamaica plant, if it was set in rich ground, and attended with equal care, would improve in size. They are however very different plants. Barham mentions a gentleman who never drank any other than the West-India Tea; and that although he could not coil up the leaves so dexterously as they do in China, yet he performed this operation tolerably well; and every person whom he regaled with it, extolled it as the very best green tea they ever drank in their lives. It is certainly unknown to what perfection it might be brought, if reclaimed from its wild state, and cultivated in the rich soil of gardens; and it well deserves the experiments of the curious.

WHITE-THORN.

MACROCNEMUM.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Contortæ*.

GEN. CHAR.—Calyx a one-leafed superior perianth, turbinate five-toothed, permanent; corolla one petaled, bell-shaped; stamens five awl-shaped filament with ovate anthers; the pistil has an inferior conical germ, a simple style, and thickish two-lobed.

lobed stigma; the pericarp a two-celled capsule, two-valved, with the valves gaping outwardly at the sides; seeds imbricate. One species is a native of Jamaica.

JAMAICENSE. JAMAICA.

Arborescens foliis ovatis oppositis, racemis sustentaculis longis incidentibus.—Browne, p. 165.

This is a small tree, with a branching smooth trunk; branches long, loose, round, warted; leaves approximating, towards the upper parts of the branches petioled, opposite, large, oblong, with a short point, entire, nerved, smooth on both sides. Petioles short, thickish, round, smooth; flowers in a sort of panicle; peduncles axillary, opposite, longer than the leaves, round, compressed, smooth, three-parted above, with trichotomous branchlets, the last one-flowered, corolla rather large, of a yellowish green, tube half an inch long, regular, narrower at the throat, before opening five-cornered, then cylindric; divisions of the border acute, almost upright; filaments the length of the tube, from the base above the middle very hairy, a little inclined; anthers vertical, oblong, tawny; germ ob-conical, smooth.—*Swartz*. Browne says this plant was found about Manchioneal rising generally twelve or fourteen feet. Mr Anthony Robinson says he found it plentifully on the road from Toby Abbott's to Clarendon Cross, where it was known by the name of White-Thorn. Some people, he says, scrape the exterior bark from the root, and having peeled the interior bark from the woody part, and bruised it, apply it to the affected part in tooth-ache, which it is said effects a cure.

WHITE-WOOD OR CEDAR.

BIGNONIA.

CL. 14, OR. 2—*Didynamia angiospermia*. NAT. OR.—*Personate*.

GEN. CHAR.—See French Oak, p. 309.

LEUCOXYLON.

WHITE WOOD.

Nerio affinis arbor siliquosa folio palmato seu digitato flore albo.—*Sloane*, v. 2, p. 62. *Pentaphylla arborea, flore sub-rubello.*—*Browne*, p. 263.

Leaves digitate; leaflets quite entire, ovate-acuminate.

The trunk of this tree is of a middling size with upright stiff branches; leaves terminating, having five and sometimes seven or eight leaflets, which are broad-lanceolate, nerved, veined, and smooth. Flowers solitary, terminating, large, rose-coloured; calyx two-lipped, upper lip rounded, lower bifid, with ovate sharp teeth; corolla irregular, tube long, narrow, a little swelling at bottom; border two-lipped, upper lip shorter, bifid, lower larger trifid; all the segments rounded, waved, somewhat villose; anthers vertical, black; silique very long pendulous, cylindric-linear.—*Swartz*. This tree grows as large as any in the island, having a very great straight trunk covered with a smooth whitish bark, and a very hard white wood. The petioles are three or four inches long. The leaves fall off for some weeks, and then the flowers come out of the ends of the twigs, several together on inch-long peduncles; they are white, like those of stramonium, and fall off very soon. The pod is five or six inches long, brownish, square, and marked with several eminent lines. It grows in the lowlands by river sides, and

and is felled and made into planks to sheath ships, as the worms avoid this wood.—*Sloane*. This tree is found in many parts of Jamaica, growing best in a free soil and low warm situation, but is more frequently met in the hills and inland woods. It grows to a considerable size when raised in a kind soil, and is generally looked upon as a good timber wood, but when its growth is not luxuriant, it is only fit for cattle yokes, and such other small conveniences as require a tough yielding wood. The juice and tender buds of this tree are said to be an antidote against the poisonous juice of the Manchioneel: they are indeed bitter, and may serve to prevent excoriations or blisters for a time, and thereby protract the operation of that caustic juice, until a part of its virulence wears off, or other assistance can be obtained; but emulsions and oily medicines will be always found to answer much better.

See—FRENCH OAK.

WHORTLE BERRY—See JAMAICA BILBERRY.

WILD-CANE OR REED.

ARUNDO.

CL. 3, OR. 2—*Triandria digyna*. NAT. OR.—*Graminae*.

GEN. CHAR.—See Bamboo, p. 43. The following are only considered as varieties of the *Bambos*. X

TABACARIA.

Erecta major, caudice bipolycaris diametri, spica spatiosa.—Browne, p. 138, A. 1.

The larger Wild or Bamboo-cane is very common in the cooler swampy bottoms among the mountains and rises frequently to the height of twelve or fourteen feet. It is jointed like other reeds, about an inch and a half in diameter near the bottom, and tapers gradually to the top; the outward coat is hard and smooth, and the body firm and filled with a sort of fibrous substance; the whole stalk is strong and elastic, and generally used for wattles, for which they are well adapted. I have seen them yet strong and perfect in houses built an hundred years. Moisture is observed to destroy them very soon. They are also used for baskets, when split, and the inner rind taken away.—*Browne*.

Arundo maximo folio dentato.—*Sloane*, v. 1, p. 109. *Erecta major fluvialibus, culmo excavato polycaris diametri*. Browne, p. 138, A. 2.

This is pretty much like the former and rises fifteen feet high, when its stem is as thick as the human arm; it is jointed, hollow, and hard; having at the joints lanceolate dark green leaves, which are prickly rough on the margin. From some of the joints spring branches having similar leaves; and from the top issue many leaves together, from among which comes out the panicle. It is used for the same purposes as the other, and the tender tops of both are cured as a pickle.

Erecta minor, panicula laxa spatiosa, spicillis distichis lanuginosis.—Browne, p. 138, A. 2.

Browne

Browne calls this the Seaside Reed, which he found below Oxford, in the parish of St. Thomas in the East, seldom rising above three and a half feet, growing in dry sandy places near the sea.

See BAMBOO.

WILD-CARROT—See CELANDINE.

WILD-CASSADA—See CASSADA.

WILD-CINNAMON—See CINNAMON, WILD.

WILD-CLOVE—See BAYBERRY.

WILD-CUCUMBER.

MELOTHRIA.

CL. 3, OR. 1.—*Triandria monogynia*. NAT. OR.—*Cucurbitaceæ*.

GEN. CHAR.—Calyx a one-leafed, bell-shaped perianth, ventricose, five-toothed, superior, deciduous; corolla one-petaled, wheel-shaped; tube the length of the calyx, and fastened all round to it; border five-parted, flat; segments broader outwards, very blunt; stamens three conical filaments, inserted into the tube of the corolla, and of the same length; anthers twin, roundish, compressed; the pistil has an ovate-oblong germ, acuminate, sub-inferior; style cylindric the length of the stamens; stigmas three, thickish, oblong; the pericarp an ovate-oblong berry, internally without the partitions three-parted: seeds several, oblong, compressed. There is only one species, which is a native of Jamaica.

PENDULA. PENDULOUS.

Cucumis minima fructu ovali nigre levi.—Sloane, v. 1, p. 227, t. 142, f. 1. *Scandens, foliis obtuse triangularibus sub-crenatis fructu glabro*—Browne, p. 124.

Stem slender, mounting by clavicles, or running along the ground for five or six feet. Leaves, flowers, and clavicles come out together. The leaves are on inch long pedicels, roundish, triangular, a little auriculated, an inch and half long and as much broad; they are rough and harsh to the touch, somewhat sinuated about the edges, and of a dark green colour. The clavicles are very tender. Peduncle axillary solitary, bristle shaped, one-flowered; flower yellow. Fruit the size and shape of a nutmeg, smooth, blackish when ripe, and full of small white seeds, like other cucumbers, lodged within an insipid cooling pulp. It grows by hedges and ditches, and the fruit is eaten pickled when green, and is good when fully ripe.—*Sloane*. Browne says the plant is nearly allied to *cucumis*, from which it is distinguished only by its hermaphrodite flowers. Swartz says that it always appeared to him to be monœcious, which would only make it differ from that genus in having a berried fruit,

See CUCUMBER.

WILD-GINGER.

ALPINIA.

CL. 1, OR. 1.—*Monandria monogynia*. NAT. OR.—*Scitamineæ*.

So named after Prosper Alpinus, a famous physician and botanist.

GEN.

GEN. CHAR.—Calyx a perianth three-toothed, equal, tubulose; corolla one-petaled, three-parted, equal; nectary two-lipped, the lower lip spreading; the pistil has an inferior germ, a filiform style, and obtuse stigma; the pericarp is an oval three-celled capsule; seeds ovate angular. This genus of which there are two species, both natives of Jamaica, differs only from *amomum* and *costus* in its habit, and racemed inflorescence.

1. RACEMOSA. RACEMED.

Zinziber sylvestre minus, fructu e caulium summitate exeunte.—
Sloane, v. 1, p. 165, t. 105, f. 1.

Racemes terminating, spiked, flowers alternate, lip of the nectary trifid, leaves oblong acuminate.

Root fleshy, branched, having the smell and taste of ginger; stem from two to five feet in height, herbaceous, round, smooth, leafy; leaves sheathing at the base, alternate, lanceolate-ovate, smooth and even, quite entire, with transverse nerves: Raceme erect, coloured, shining; bractes alternate, lanceolate-acuminate, almost the length of the flowers, blood-red. Flowers on very short peduncles, one or two between the bractes; calyx somewhat bell-shaped, red; the teeth obsolete, truncate: corolla white, tube longer than the calyx, parts of the border erect; nectary longer than the corolla, ventricose at the base, the lower lip broader, convex at the tip, three-parted, the smaller part emarginate; filament, or upper lip of the nectary, short, involved in the lower lip, embracing it with a toothlet at the sides, germ three-cornered; the upper part of the style concealed within the channelled anther; stigma sub-capitate, emarginate; capsule inferior, roundish, with three blunt corners; seeds shining.—*Swartz*. Both the cup and germen of this plant are of a fine scarlet colour, but the germen changes when at maturity, to a deep purple black, and the calyx becomes paler. The fruit separates at the base into three equal valves, and the seeds are divided into three cells by the means of a thin membranous receptacle, which, in form, is like the fruit of *triopteris*, having three wings. The seeds are enveloped with scarlet filaments, which fasten them to the placenta, and are covered with a saffron-coloured aril.

2. OCCIDENTALIS. WESTERN.

Raceme radical, compound, erect; nectary emarginate; capsules three-celled; leaves lanceolate-ovate, very smooth.—*Swartz*.

WILD-GINGER.

COSTUS.

CL. 1, OR. 1.—*Monandria monogynia*. NAT. OR.—*Scitamineæ*.

GEN. CHAR.—Calyx a three-toothed, very small, superior, perianth; corolla, three petals, lanceolate, concave, equal; nectary one-leafed, large, oblong, tubular, inflated, two-lipped; stamen upon lip of the nectary having a two-parted anther; the pistil has an inferior germ, a filiform style, and headed stigma; pericarp a roundish crowned, three-celled, three-valved, capsule; seeds many, three-cornered.

ARABICUS. ARABIAN.

Minus scapo vestito, floribus spicatis.—*Browne*, p. 113. *Amomum*.

Leaves silky underneath.

Browne calls this the lesser anomum with a foliated stalk, found every where in the woods of Jamaica, and the same as the East Indian plant: It grows from a fleshy root, and shoots by a simple foliated stalk to the height of three or four feet, and then terminates in a handsome, sub-sessile, solitary, erect, flower, spike. The calyx is green with a purple tip, in the flower, but in the fruit blood-red; petal and nectary flesh-coloured, or white. Seeds black, without smell, but having an unpleasant taste; there is a white fungous substance adhering to the base by which the seeds are connected together. The roots of this plant are sometimes used as ginger, but are not so good.

WILD-HOPS.

CLINOPODIUM.

CL. 14, OR. 1.—*Didynamia gymnospermia*.

NAT. OR.—*Verticillata*.

GEN. CHAR.—Calyx involucre many bristled, length of the perianth, placed beneath the whorl; perianth one-leafed, cylindric, very slightly incurved, with a two-lipped mouth; upper lip wider, trifid, acute, reflected; lower lip divided, slender, inflected; corolla one-petaled, ringent, tube short, gradually widened into the throat; upper lip erect, concave, obtuse, emarginate; lower lip trifid, obtuse; middle segment wider emarginate; stamens four filaments, under the upper lip, of which two are shorter than the others, anthers roundish; the pistil has a four-parted germ; style filiform, the same situation and length with the stamens; stigma simple, acute, compressed; no pericarp; calyx contracted round the neck, gibbous round the body, containing the seeds, which are four ovate. One species is a native of Jamaica.

CAPITATUM HEADED.

Sideritis spicata scrophulariæ folio, flore albo, spicis brevibus habitibus rotundis, pediculis insidentibus.—Sloane, v. 1. p. 174, t. 109, f. 2. *Subhirsutum, foliis crenatis utrinque acuminatis, floribus conglomeratis pedunculis longis alaribus insidentibus*.—Browne, p. 259.

Leaves flat, smooth, heads axillary, peduncled.

Jacquin makes this plant a distinct genus, under the name Hyptis, from the inverted form of the corolla, and thus describes it: Stems suffruticose two or three feet high; from which issue herbaceous stems, quadrangular, roughish, two feet high; branched; leaves opposite, petioled, ovate, but with the base acute, veined, unequally serrate, both sides appearing hairy with a magnifier, deep green; the lower ones wrinkled, the largest seven inches long. Peduncles solitary, quadrangular, slender, when full grown two or three inches long, bearing at the top numerous flowers; collected into a close semi-globular head, supported at bottom by an involucre of many lanceolate leaflets. Calyx somewhat hispid, corolla white with a tinge of flesh-colour, tube somewhat hairy on the outside, but the back of the helmet more so; border spreading much, often reflex, and inverted, upper lip trifid, lower (which is uppermost by the inversion of the corolla) semibifid. The whole plant is inodorous.—Jacquin. The seeds are small, black, and shining. Barham calls this plant Iron-wort, from the figure of its leaves, and says it has a specific quality to heal all wounds and stop all fluxes of the blood and other humours; and that a decoction of it with honey, (and a little alum) makes

makes an elegant mouth-water and for sore throats. The juice is also said to be good for sore eyes. It is common in most parts of Jamaica, seldom rising above three feet. Dr. Wright notices it under the name Wild Batchelor's Button, he says it is an annual plant, herbaceous, rising three or four feet. The leaves large, rough, serrated; the flowers small and the seed vessels connected in a globular or button-like form. The leaves of this, beaten and applied to old and obstinate ulcers, have a very good effect. The buttons, when rubbed betwixt the fingers emit a most agreeable fragrance, somewhat like a mixture of the oils of rosemary, lavender, rhodium, and ambergris. As the plant is common in all waste lands, large quantities might easily be gathered, and this valuable perfume, or oil, obtained by distillation. The dried pods retain their flavour a considerable time, and might be sent home in tin cannisters or lead cases to the mother country.—*Wright*.

WILD-INDIGO—*See* INDIGO.

WILD-JASMIN.

IXORA.

CL. 4, OR. 1.—*Tetrandria monogynia*. NAT. OR.—*Stellatæ*.

GEN. CHAR.—Calyx a four-parted perianth, very small, upright, permanent; corolla one-petaled, funnel-form; tube cylindric, very long, slender; border four-parted, flat; divisions ovate; stamens four filaments, above the mouth of the corolla, very short; anthers oblong; the pistil has a roundish inferior germ, a filiform style the length of the tube, and a two-cleft stigma; the pericarp a roundish two-celled berry; seeds by fours, convex on one side, cornered on the other. Three species are natives of Jamaica.

1. AMERICANA. AMERICAN.

Leaves in threes, lanceolate-ovate, flowers thyrsoïd.

This rises with a shrubby stalk four or five feet high, sending out slender opposite branches; leaves opposite, six inches long, two inches and a half broad, on short foot-stalks. Flowers at the ends of the branches in loose spikes, they are white and have a scent like Jasmin. The coffee occidentalis is also called Wild Jasmin in Jamaica, described under the articles of Coffee.

2. FASCICULATO. BUNDLED.

Leaves ovate-elliptic; those of the branchlets sub-faciated; peduncles subtriflorous.—*Sw. Pro.* 30.

3. MULTIFLORA. MANY-FLOWERED.

Leaves lanceolate-ovate, bundled, peduncles aggregate, one-flowered, very short, berries one-seeded.—*Sw. Pro.* 30.

WILD-LEMON.—*See* SAVIN-TREE.

WILD-LIQUORICE.—*See* LIQUORICE.

WILD-MAMMEE.—*See* SANTA-MARIA.

WILD-OATS.

PHARUS.

CL. 21, OR. 6.—*Monæcia hexandria*. NAT. OR.—*Graminæ*.

GEN. CHAR.—Male flowers peduncled, calyx a two-valved, one-flowered, glume; corolla two-valved longer; stamens six filaments with linear anthers: Female flowers longer, sessile, in the same panicle; calyx a two-flowered, one-valved, glume; corolla a two-valved glume, a little longer; the pistil has a linear germ, a simple style, and three stigmas; no pericarp; the outer glume of the corolla invests the seed, now larger, muricated all round with soft adhering little hooks: seed oblong, grooved on one side, large. One species is a native of Jamaica.

LATIFOLIUS. BROAD-LEAVED.

Gramen avenaceum sylvaticum, foliis latissimis locustis longis non aristatis, glumis spadiceis.—Sloane, v. 1. p. 116, t. 73, f. 2. *Foliis nervosis, oblongis, obtusis, petiolis ita contortis, ut adversa pagina folio semper cælum respiciant*. Browne, p. 344, t. 38, f. 3.

Panicle branched, calyces apetalous, naked, awnless.

This grass has many three or four inches long filaments, with lateral fibrils, uniting in a roundish root. Root-leaves several, encompassing the stalk and one another by their footstalks, which are striated, of a light brown colour, and about nine inches long; leaves oblong-ovate, six inches long and two broad, acuminate, striated, thin, hard, and rough, with the mid-rib prominent at the back. Stalk a foot and a half high, having below two very short joints, dividing at a foot from the ground into several branches, on which are naked flowers half an inch in length, sessile, alternate, outer glumes blackish, and within that a long rolled up membrane. It grows every where in the inland high shady woods, and thought to be a most nourishing grass for cattle.—Sloane.

WILD-OCHRA.

MALACHRA.

CL. 16, OR. 6.—*Monodelphia polyandria*. NAT. OR.—*Columniferae*.

This generic name is derived from the Greek word for soft, on account of the softness of the leaves.

GEN. CHAR.—Calyx a common perianth mostly five-flowered, three or five leaved, large; leaflets cordate, acute, permanent; chaffs bristle-shaped, set round the proper perianths; proper perianth one-leafed, bellshaped, small, five-cleft, permanent; the proper corolla five obovate petals, entire, fastened at the bottom to the tube of the stamens; stamens many filaments, conjoined below into a tube, above loose, gaping along the whole surface of the cylinder; anthers kidney-form; the pistil has an orbicular germ, a cylindric ten-cleft style, and globular stigmas; the pericarp a roundish capsule, divisible into five cells, compressed on one side, gibbous on the other; seeds solitary, roundish, angular. One species is a native of Jamaica.

CAPITATA. HEADED.

Malva aspera major aquatica, ex hortensium seu rosearum genere, flore minore luteo, semine aculeato.—Sloane, v. 1, p. 217, t. 137, f. 1.

Hirta

Hirta assurgens, foliis angulato-cordatis, obtuse lobatis, atque dentatis; floribus conglobatis, capitulis foliolatis, pedunculis validis alaribus.—Brown, p. 218. Sida 10.

Heads peduncled, three-leaved, seven-flowered.

Stem thick, round, erect, from two to four feet high, rough with prickly hair, as is the whole plant; leaves pedicelled, heart-shaped, or angular, having two or three points, about four inches long and three and a half broad, indented or sinuated about the edges, hairy; general peduncles two together, axillary; flowers aggregate, peduncled. The common calyx three sub-triangular, auriculated, leaflets, which are stiff and sharp; proper calyx single, one-leaved, half five-cleft, with the divisions lanced, bristly at tip with white bristles; corolla yellow, spreading, petals rounding. It grows commonly in Jamaica in ditches and marshy places. The tender buds and leaves of this plant are very mucilaginous.

WILD-OLIVE OF BARBADOES.

BONTIA.

CL. 14, OR. 2.—*Didynamia angiospermia.* NAT. OR.—*Personatæ.*

This was so named from Jacobus Bontius, a physician at Batavia.

GEN. CHAR.—Calyx one-leaved, five parted, upright, permanent; corolla one-petaled, ringent, tube long cylindric; border gaping; upper lip upright, emarginate; lower revolute, semitrifid, the size of the upper; stamens four subulate filaments, bending to the upper lip, the length of the corolla, two shorter; anthers simple; the pistil has an ovate germ, a simple style the length of the stamens; stigma bifid blunt; seed an oval nut, one-celled, germinating. There is only one species, a native of Barbadoes, which thrives well in Jamaica.

DAPHNOIDES.

Leaves alternate, peduncles one-flowered.

This has a woody brittle stem and branches, rising to the height of ten feet, and full of narrow, lanceolate, thick, smooth leaves, from among which grow the peduncles from the sides of the twigs and branches. Calyx leaflets triangular with a sharp point; corolla dusky yellow, with a line of dusky purple hairs covering the inside of the middle divisions of the lower lip; and two fainter lines of purple hairs on the inside of the upper lip; the lower lip is the smallest and has three triangular recurved points, two ovate, one inner. Birds are said to fatten on the fruit, and it gives their flesh a bitter flavour. In Barbadoes it is formed into beautiful hedges, for which it is well adapted by its dense branches and foliage, as well as from its rapid growth; for when planted from slips in the rainy season, they will grow from four to five feet high in eighteen months.

WILD-PARSLEY.—See HEART-PEAS.

WILD

WILD-PINE.

TILLANDSIA.

CL. 6, OR. 1.—*Hexandria monogynia*. NAT. OR.—*Coronarie*.GEN. CHAR.—*See* Old Man's Beard, vol. 2, p. 18. Besides those described under that name, the following species have been discovered in Jamaica :

1. UTRICULATA. BOTTLED.

Viscum caryophylloides maximum flore tripetalo pallide luteo semine filamentoso.—Sloane, v. 1, p. 188. *Parasitica major foliis attenuatis basi ventricosis, racemo laxo spatiosa assurgenti*.—Browne, p. 194, T. 4.

Culm panicled.

This curious plant grows every where in the woods of Jamaica, on decaying trees, of which many brown fibrils encompass the arms, or take firm hold of the bark, not as mistletoe, to suck nourishment, but only weaving and matting themselves among one another, and thereby spreading a firm and strong foundation to the plant; whence arise several leaves on every side, like those of aloes or ananas, which has given occasion to its name of Wild Pine; they are folded or enclosed one within another, each three feet and a half long, and three inches broad at the base, but ending in a point, having a very hollow or concave inward side, and a round or convex outward one, forming a basin or cistern, containing about a quart of water, which in the rainy season falls upon the upper parts of the spreading leaves, and being conveyed down them by channels, lodges in the bottom as in a bottle; for the leaves being swelled out at the base, bend inward close to the stalk, thus hindering the evaporation of the water by the heat of the sun. From the midst of the leaves rises a round, smooth, straight green stalk, three or four feet high, having many branches, and, when wounded, yielding a clear white mucilaginous gum. The flowers come out here and there on the branches. The corolla is of a yellowish white or herbaceous colour, and the calyx is made up of three green viscid leaves, with purple edges. Capsule greenish brown, having under it three short capsular leaves, and within several long pappose seeds, which are oblong pyramidical, and very small, having a very soft down, as long as the capsule itself. By this down the seed is not only carried by the wind, but it is enabled by it to stick fast in the bark of trees. As soon as it sprouts, although it be on the under part of a bough, it rises perpendicularly; for if it had any other position, the cistern could not hold the water which is necessary for the life and nourishment of the plant. In the mountainous as well as dry low woods, this reservatory is very useful to men, birds, and insects, who in scarcity of water frequent these plants in troops. Dampier says he has many times, to his great relief, stuck his knife into the leaves, just above the roots, and let out the water into his hat.—*Sloane*.

2. SERRATA. SERRATE.

Parasitica maxima, foliis amplioribus obtusis, ciliato sub-spinosis, racemo assurgenti pyramidato.—Browne, p. 194, T. 7.

Leaves serrate-spiny above, spike comose.

Browne calls this the largest wild-pine, with a variegated flower-spike.

3. LINGULATA. TONGUE-LEAVED.

Viscum

Viscum caryophylloides maximum, capitulis in summitate conglomeratis.—Sloane, v. 1, p. 189, t. 120. *Media, parasitica, foliis oblongis, obtusis floribus comosis terminalibus.*—Browne, p. 194, T. 3.

Leaves lanceolate-tongue-shaped, quite entire, ventricose at the base.

This grows on large trees, to which it fastens itself by many long dark brown threads, making altogether an oblong root. The radical leaves are linear tongue-shaped, acuminate, shining, quite entire, a foot long, numerous, containing water. Culm leafy, simple, erect, solitary, bearing conglomerate flowers at the top. Flowers yellow, inodorous, three inches long, capsules brown. The leaves at the top of the culm are many of them reddish, looking something like a rose.

4. TENUIFOLIA. FINE-LEAVED.

Viscum caryophylloides minus, foliorum imis viridibus, apicibus subrubicundis, flore tri-petalo purpureo semina filamentoso—Sloane, v. 1, p. 190, t. 122, f. 1. *Parasitica parva foliis tenuissimis erectis, spica breviori simplici disticha.*—Browne, p. 194, T. 2.

Spikes alternate-imbricate, flowers distich, leaves linear, filiform, erect, bristle-shaped at the tip.

Stem a foot high, simple, sheathed, leafy. Leaves often the length of the stem; the radical and lower ones sheathed at the base, above the base attenuated, keeled, convolute, rigid. Stem-leaves or sheathes closely surrounding the stem, terminated by a very long linear filiform apex. Spikes three or four, terminating, sessile, sub-distich, an inch long, lanceolate. Spathes oblong, obtuse; petals blue. Sloane observes that the leaves are very like those of pinks in shape, their under parts are green, and upper reddish.

5. MONOSTACHYA. ONE-SPIKED.

Parasitica foliis majoribus obtusis; spica assurgenti, divisa, squamosa.—Browne, p. 194, T. 6.

Leaves linear, channelled, reclined; culm simple, imbricate, spike simple.

Browne calls this the larger *Tillandsia* with obtuse leaves.

6. FASCICULATA. BUNDLED.

Spikes lateral, distich, imbricate, leaves lanceolate-subulate, erect, strict.

Roots filiform, rigid; stem simple, from one to two feet high, leafy; leaves next the root sheathing at the base, broad, concave; towards the end lanceolate, convolute subulate, upright and straight, or a little recurved at the tip, pubescent on the outside; stem-leaves shorter, sub-imbricate, ovate, ending in a long awl-shaped point. Spikes terminating and lateral, erect, alternate, ancipital, an inch wide, imbricate in two rows with bractes or spathes, which are called glumes by Linneus, equitant, ovate-acuminate, membranaceous at the edge, smooth; rachis three-sided: Flowers solitary, sessile between the spathes; calyx tubular, three-cornered, or two keeled at the back, three-parted at the end; after the flower increases, it surrounds the capsule with two leaves, the superior bifid and two-keeled, the inferior lanceolate and convex. Capsule oblong acuminate, an inch long, three-cornered, three-celled, three-valved; valves rigid, black within; seed-down capillary silky. Native of Jamaica on trees near the coast.—Swartz.

7. NUTANS.

7. NUTANS. NODDING.

Spikes sub-divided, nodding; flowers distinct, ovate; leaves ovate-lanceolate membranaceous; stem almost naked.

From one to two feet high. All the leaves radical, entire, ventricose at the base, striated longitudinally, marked with lines, smooth, half a foot long. Scape sheathed, jointed, round, loose, smooth; sheaths alternate, approximating, ovate-lanceolate, acuminate, striated, smooth, membranaceous. Spikes terminating, alternate, somewhat remote; rachis angular; flowers ovate, scattered, distinct, approximating but not imbricate; bractes or spathes ovate, obtuse, concave, membranaceous, rigid, solitary, inclosing the florets; calyx three leaved, leaflets ovate-lanceolate; petals three, ovate-lanceolate, erect, shrivelling, white; filaments awl-shaped, from the base of the petals and of the same length with them, erect; anthers ovate, bifid at the base, sub-sagitate; germ three-cornered, acuminate, smooth; style short, three-cornered; stigmas three, simple; capsule roundish ovate, acuminate, three-cornered, three-keeled, three-celled, three-valved; valves black and shining within; seed-down very long, white, shining, and silky. Native of Jamaica on the branches of trees in the mountains — *Swartz*.

8. CANESCENS. HOARY.

Spikes subtern, leaves linear, erect, equalling the stem, hoary.

About a foot high; radicles short, simple, filiform, curled, brown; stem sheathed, leafy, undivided; radical leaves sheathed at the base, imbricate, whitish, rigid; sheaths very wide, ovate, concave, ventricose, membranaceous; stem-leaves sheathed loosely, and linear, acute. Spikes terminating, for the most part in threes, approximating, sessile, ovate, acute, compressed a little, sub-distich; flowers distich; spathes ovate lanceolate, imbricate, equitant; smooth; petals long, red; capsule oblong, acuminate, three-cornered, involved in a spathe. Native of Jamaica on trees near the coast.

9. ANGUSTIFOLIA. NARROW-LEAVED.

Spikes in bundles, leaves linear-lanceolate, sub-erect, smooth, surpassing the stem.

Two feet high; stem almost upright, simple, sheathed, leafy; radical and stem leaves imbricate, wide, and sheathing at the base; lanceolate above, and linear at the end, striated, longer than the whole plant, stiff, and straight; radical sheaths wider, sub-ventricose. Spikes very many, alternate, separated by leafy sheaths, sub-imbricate, compressed, lanceolate, an inch and a half long, many flowered. Flowers distich; spathes imbricate, equitant, ovate, acuminate, keeled, striated, smooth; capsules elongated, acuminate, three-sided, smooth, longer than the spathes. Native of Jamaica, on trunks and branches of trees. — *Swartz*.

10. PRUINOSA. FROSTY.

Spike simple, spathe imbricate, leaves lanceolate-linear, reclined; these and the spathes tomentose with little scales.

From two to three inches high; rootlets filiform, simple, rigid, curled; stem very short, leafy; radical leaves sheathing at the base, sheaths wide; ovate, ventricose, membranaceous, striated; the edges of the leaves are convolute, they are bent different ways, and are tomentose with very numerous scales, which are sub-imbricate (not pressed close) torn, whitish, glittering like hoar-frost. Stem leaves sheathed, imbricate,

ovate, equal to the radical leaves and like them, with embracing sheaths, not ventricose at the base. Spike terminating, an inch long, ovate, acute, flowers sub-distich; spathes ovate-acuminate, scaly-tomentose all over; petals longer than the spathes, blue; capsule oblong, acuminate, three-sided, smooth. This is not to be confounded with *recurvata* (See Old Man's Beard) which has linear subulate leaves, radical peduncles, and two-flowered spathes. Native of Jamaica, on old boughs of trees.—Swartz.

11. PANICULATA. PANICLED.

Parasitica major foliis attenuatis basi ventricosis; racemo laxo spatioso assurgenti.—Browne, p. 194, T. 4

Leaves radical, very short; culm almost naked, branches sub-divided, ascending. Browne calls this the loose-headed Wild Pine. X

12. FLEXUOSA. FLEXUOSE.

Spikes loose, flexuose, flowers distich, somewhat remote, leaves lanceolate-linear, reclined; stem sub-divided at the top.

Roots filiform, long, rigid; leaves mostly radical, wider at the base, sessile, ventricose, embracing, entire, loose, striated, membranaceous, beneath whitish, sub-tomentose or meally with very minute scales, which are peltate and hollowed in the middle, surrounded by hyaline striated margin, not to be distinguished without a magnifying glass. Stem or scape longer than the leaves, two or three feet high, loose, round, with alternate, lanceolate, acute, red, sheaths; the lower ending in linear leaves; sub-divided at the top, and terminated by two or three spikes, which are solitary, long, loose, with a flexuose three-sided rachis, and alternate, distich, remotish, florets; bractes or spathes one-leaved, concave, striated. Calyx three-parted, three-cornered at the base; segments erect, coloured; petals three, linear, longer than the calyx, turned back at the tip, scarlet or blue; filaments alternately a little shorter, inserted into the receptacle, filiform, almost the length of the petals; anthers ovate, bifid at the base, whitish: germ ovate, three-cornered, three-keeled, three-celled, three-valved, within shining and black; seeds crowned with a capillary yellowish down. Native of Jamaica, on the branches of old trees near the coast.—Swartz.

13. SETACEA. BRISTLE-LEAVED.

Spike simple, spathes distich imbricate, leaves linear, filiform, reclined, smooth.

This resembles the *tenuifolia*, but is distinct in having the leaves reclined, and the spike simple, whereas in that, the leaves are erect, the spikes many and alternate. The stem a foot high and more, round, almost upright, covered from the root up to the spike with alternate sub-imbricate sheaths, broad-ovate at the base, and at the end attenuated into linear setaceous leaves. Radical leaves almost the length of the stem, sheathing, imbricate, numerous, somewhat meally with very minute scales, ash-coloured, rigid. Sheaths small, or only the base of the leaf widened. Spike terminating, undivided, ovate-lanceolate, with alternate, distich flowers; spathes wide-ovate, acuminate, membranaceous, sub-coriaceous, equitant, capsule ovate-acuminate. Native of Jamaica on trees.—Swartz.

See OLD MAN'S BEARD.

WILD-PLANTAIN.—See BASTARD-PLANTAIN.

WILD-POTATON SLIP.—See BINDWEEDS.

WILD-RICE.—See TRUMPET-REED.

WILD ROSEMARY.

CROTON.

CL. 21, OR. 9.—*Monœcia monodelphia.* NAT. OR.—*Tricoccæ.*

GEN. CHAR.—Male flowers smaller than the females; calyx a cylindric perianth, five-toothed; corolla in some five-petaled, scarce longer than the calyx, oblong, obtuse; nectary five glands, affixed to the receptacle, small; stamens from ten to fifteen subulate filaments, connected at the base, length of the flower; anthers roundish, twin. Female flowers remote from the males, on the same plant; calyx a many leafed perianth; leaflets ovate-oblong, erect; corolla petals as in the males (in some scarce manifest); the pistil has a roundish germ, three styles, reflex spreading, length of the flower, half two-cleft; pericarp a roundish capsule three-lobed at the sides, three-celled, each of the cells two-valved, size of the calyx, frequently much larger; seeds solitary, ovate, large. Fourteen species have been discovered in Jamaica.

1. LINEARE. LINEAR.

Ricino affinis odorifera fruticosa major rosimarini folio, fructu tricocco albido—Sloane, v. 1, p. 133, t. 86, f. 1. *Fruticulosum; foliis longis, angustis, subtus incanis, margine reflexis.*—Browne, p. 347, C. 5. *C. cascarilla* of Linneus.

Leaves linear, very entire, obtuse, tomentose beneath, stem shrubby.

This rises with a shrubby stem about six or seven feet high, sending out many side branches, which are covered with a smooth bark of a yellowish white colour, and garnished very closely with narrow stiff leaves near three inches long, and about one eighth of an inch broad, of a light green on their upper side, but their under of the same colour with the bark, the midrib is furrowed on their upper side, and very prominent on the lower; the upper part of the branches divides into four or five smaller, arising from the same joint, and nearly equal in length; between these arise long loose spikes of whitish green flowers. The whole plant has an aromatic odour when rubbed. Swartz remarks that on the coast it has narrower leaves than in the inland parts, and that the flowers are dioecious.—*Martyn.* It resembles the European Rosemary pretty much, both in the manner of its growth and the form and colour of its leaves, whence it has acquired the name of Wild-Rosemary. It is frequent in most parts of Jamaica, and generally used in warm resolute baths and fomentations. Barham says the powder of the dried leaves is a specific in the cholic, and in all cold watery undigested humours, having all the virtues of rosemary.

2. GLABELLUM. SMOOTH.

Mali folio arbor, artemisiæ odore, flore pentapetalo spicato.—Sloane, v. 2, p. 30, t. 174, f. 1, 2. *Fruticosum; foliis subrotundo-ovatis, subtus sub-incanis, alternis; spicillis alaribus.*—Browne, p. 348, C. 7.

Leaves ovate, bluntish, very entire, smooth, and even; fruits peduncled.

This

This grows from twenty to thirty feet high, having a white wood and brown bark; the branches grow straight up, having a great many leaves, almost like those of an apple-tree, standing without order on half-inch pedicels; the flowers are many, standing round the ends of the branches, in panicles; they are whitish, and when rubbed smell very sweet, as do the leaves and all parts of the plant. It grew in Two Mile Wood.—*Sloane*. It is common in all the lowlands about Spanish Town and Kingston; where it grows in a shrubby form, and seldom exceeds seven or eight feet in height, but dies after a few years. All its parts are of an active warm nature, and have a pretty agreeable smell.—*Browne*.

3. LUCIDUM. LUCID.

Erectum glabrum, foliis ovatis oppositis vel ternatis, spicis terminalibus.
Browne, p. 347, C. 6.

Leaves ovate, smooth; flowers in spikes; styles many-cleft, depressed-pubescent, becoming shrubby.

Calyx of the male ten-leaved, imbricate, hirsute within; no corolla; stamens twelve: calyx of the females five-leaved; germ hirsute; styles three, six-parted. This seldom rises above three feet, it is pretty simple towards the root, and divides into three or four simple branches towards the top; the leaves are oval and pointed both ways. It is frequent in St. Elizabeth's.

4. HUMILE. HUMBLE.

Fruticulosum minus, foliis villosis cordato-acuminatis, ramulis gracilibus glabris.—Browne, p. 347, C. 2.

Leaves cordate, very entire, scabrous, sub-ciliate, tomentose beneath, stem shrubby.

This is a shrub two feet high; with a smooth branching stem; the branches hoary at the end. Leaves alternate, rufous, clammy, with warts, terminated by minute white hairs, contiguous at the base; petioles somewhat hairy. Spikes terminating, erect, male flowers above five to seven, smaller, whitish; calyx five-leaved, leaflets hoary; petals five white, equal to the calyx; filaments from twenty to twenty-four, anthers compressed, whitish; females below, larger, greenish; calyx five-leaved, leaflets tomentose or hoary; no corolla; germ three grooved, hirsute; styles three, contiguous to the base, white, four-parted to the middle; stigmas first white, then rufescent; capsule tricocous, somewhat hirsute; seeds roundish. The smell of the whole herb is strong and balsamic.—*Swartz*. The small sea-side balsam is common in the Savannas about Kingston; it is very hot and pungent upon the palate, and frequently used in baths and fomentations for nervous weaknesses.—*Browne*, p. 347, C. 2.

5. FLAVENS. YELLOW.

Fruticulosum et villosum, foliis cordato acuminatis, ramulis crassioribus tomentosis.—Browne, p. 347, C. 3.

Leaves cordate oblong, very entire, tomentose on both sides, branchlets more closely tomentose.

The *Yellow Balsam* is common in the Savannas about Kingston, and rises frequently to the height of two or three feet, it is pretty much like the *humile*, both in size and general form, but is easily distinguished by the thickness of its extreme branches, which,

in this species, are pretty soft and luxuriant. All parts of the plant are equally sharp, and, like that, used in resolute baths.—*Browne*.

6. ELUTERIA.

Fruticosum erectum et subvillosum, foliis cordato-acuminatis, spicis terminalibus.—*Browne*, p. 347, C. 4. *Cluytia*.—*Linneus*.

Leaves ovate-acuminate, entire, scattered, smooth, scaly, silver-coloured below; stem arboreous; racemes composite; axillary.—*Sw*.

Browne calls this plant the *Sea-side Balsam*, larger than the other species, growing frequently to the height of four or five feet, and commonly found in low moist bottoms. The leaves and tender tops are said to heal sores of all sorts very well, and frequently used in baths and fomentations. On breaking the more tender branches of any of these species, a large drop of thick balsamic liquor oozes from the wound, from whence they have obtained the appellation of *balsams*.—*Browne*. This is the *cluytia eluteria* of *Linneus*, which *Swartz* made a species of *croton*, but has some doubt if *Browne's* be the same plant.

This tree is common near the sea-shore, and rises to about twenty feet. The leaves are from two to three inches long and of a proportional breadth. On the upper side they are waved and of a rusty colour; on the under ribbed, and of a fine glossy or silvery appearance. From the axillæ they have numerous small spikes, with a great quantity of white, small, and fragrant flowers. The capsule is trilocous like other *crotons*. The bark is the same as the *casarilla* and *eluteria* of the shops.—*Wright*.

7. PALLENS. PALE.

Leaves ovate-acuminate, quite entire, smooth on both sides; racemes solitary, erect, terminating; calyxes larger than the fruit.

This rises with a shrubby stem to the height of seven or eight feet, is covered with an ash-coloured bark, and divides at top into many slender branches; some of these are terminated by five or six branchlets, all arising from the same joint; these are naked below, but towards their upper part they have smooth lanceolate leaves, about two inches and a half long, and three quarters of an inch broad, on pretty long footstalks; the flowers are produced in short spikes at the ends of the branches, are of an herbaceous colour, and are inclosed in large green calyxes.

8. BALSAMIFERUM. BALSAM.

Leaves ovate-lanceolate, scabrous, very entire, tomentose beneath.

This is an upright, branched, diffused, shrub, three or four feet high, very sweet smelling, covered all over with a close yellowish nap, and abounding with a balsamic, thickish, odorous, brownish, sap, which exudes wherever a cut or rupture is made. Leaves petioled, green above, ferruginous yellow underneath, thick, scatteringly alternate, two or three inches long, numerous. Spikes sub-terminating from the divisions of the younger branchlets; flowers small with white petals. It much resembles the *humile* but the leaves are not cordate.—*Jacquin*.

9. GLOBOSUM. GLOBE.

Leaves ovate, obtuse, entire; peduncles in pairs; flowers dioecious, fruits globular, echinate-hispid.—*Sw*.

10. POPULIFOLIUM. POPLAR-LEAVED.

Leaves

Leaves broad-ovate, acuminate, serrate-toothed, somewhat rough with hairs, with one gland at the base above; petioles the length of the leaves; racemes terminating, erect, solitary; stem shrubby.

Branches smooth, scarred; leaves approximating towards the top, broad-ovate, unequally tooth-serrate, with stellate fulvous hairs on both sides; petioles the length of the leaves. Racemes terminating, erect, an inch and half long; peduncles rough with hairs; calyxes of the females with lanceolate, hairy, tooth-gashed, leaflets, and glandular teeth; of the males smooth, coloured; germ rough with hairs.—*Patel.*

11. GLANDULOSUM. GLANDULAR.

Minus trichotomum sub-hirsutum, foliis oblongis dentatis, spicis ad divaricationes ramorum sitis.—Browne, p. 346, C. 1.

Leaves oblong-serrate, biglandular at the base, fruits sessile.

This plant grows in many parts of the savannas, in Liguanea, but seldom rises above sixteen or seventeen inches. The seeds are small and much used both by wild and tame fowls, who pick them up every where in the fields.—*Browne.*

12. MACROPHYLLUM.

Leaves cordate roundish, acuminate, entire, thick, tomentose, nerved underneath.—*Sw.*

13. NITENS. SHINING.

Leaves cordate-elliptic, acuminate, almost entire, smooth, shining above, dotty and silvery underneath, racemes axillary, leaves shorter, erect.—*Sw.*

14. LAURINUM.

Leaves oblong, acute, quite entire, of some consistence, smooth; petioles rugged, they and the leaves dotted underneath; racemes axillary, very long, patulous, stem arborescent.—*Sw.*

WILD-SAGE.

LANTANA.

CL. 14, OR. 2.—*Didynamia angiospermia.* NAT. OR.—*Personatæ.*

GEN. CHAR.—Calyx a one-leafed perianth, very short, converging, obscurely four-toothed, tubular: corolla one-petaled, nearly equal; tube cylindric, slender, longer than the calyx, rather oblique; border flat, unequally four-cleft, obtuse: stamens four filaments, very small, placed in the midst of the tube of the corolla, very slender, of which two are a little higher; anthers roundish: the pistil has a roundish germ; a filiform short style; stigma refracted, sharp downwards like a hook, and as it were obliquely growing to the tip of the style; pericarp a roundish one-celled drupe; seed a round-pyramidal three-celled nut, the lowest cell sterile; kernels solitary oblong. Six species are indigenous to Jamaica.

1. TRIFOLIA. THREE-LEAVED.

Periclymenum rectum humilius, salviæ folio rugoso majore flore purpureo, fructu oblongo esculento purpureo.—Sloane, v. 2, p. 82, t. 195, f. 3.

f. 3. *Erecta minor sub-assurgens, foliis verticillato ternatis, pedunculis longis, spicis ovatis.*—Browne, p. 268, L. 1.

Leaves tern or quatern, elliptic, serrate, wrinkled above, villose beneath, stem unarmed, spikes oblong, imbricated.

Stem shrubby, branched, round, rugged; branches upright, round, rugged. Leaves petioled, three together, seldom four, ovate-lanceolate, acuminate, nerved, the upper surface almost smooth, beneath somewhat hirsute, hoary. Spikes peduncled sub-imbricate, with lanceolate, entire, distinct, and somewhat hirsute, bractes; when young in a head, but afterwards an inch in length. Flowers pale blood-red, and not changeable; peduncles axillary, opposite, solitary, the length of the leaves, striated, angular, hirsute; calyx very minute, three-toothed, with the hinder tooth a little longer; corolla salver-shaped, irregular; tube narrow, gibbous in the middle; border almost flat, oblique, four-cleft; upper segment almost upright, roundish; the lateral ones, only half the size, spreading; the lower broader, waving; throat yellow; anthers extremely minute, brownish green; style the length of the tube; fruit a berried drupe, red, roundish; nucleus hard, two-celled.—*Swartz*. Sloane says the fruit of this species is more juicy than that of the others, and not unpleasant to eat. It grows on the banks of the Rio-Cobre, near Spanish Town, and in most other places in the lowlands.

2. ANNUA. ANNUAL.

Periclymenum rectum urticæ folio hirsuto majore, flore flavo.—Sloane, v. 2, p. 82, t. 195, f. 2.

Leaves opposite and tern, cordate, rugged, stem unarmed, spikes oblong.

This grows six or seven feet high with a shrubby stem; the bark white and smooth; branches inclining downwards; leaves opposite, rough, serrate, a little woolly on their inner side. Peduncles, by pairs or three at a joint, sustaining thick spikes of flowers of an orange or deep yellow colour. The berries turn black when ripe and are eatable. The leaves are generally used in baths and fomentations for hydropic patients. Barham says "for its great qualities it may well be called sage, having all its virtues. It makes an excellent tea to strengthen the stomach; outwardly, the bruised herb applied like a poultice, cleanses the worst ulcers, and heals wounds. The decoction is an excellent bath to strengthen the limbs."

3. STRICTA. STIFF.

Periclymenum rectum salviæ folio rugoso longo et angustissimo.—Sloane, v. 2, p. 84, t. 195, f. 4.

Leaves opposite, oblong-lanceolate, acute; stem unarmed, heads roundish, bractes ovate-lanceolate, squarrose.

Stem square; leaves very long and narrow, an inch and a half in length, and one-third of an inch wide in the middle, toothed, of a dark colour above, whitish underneath, on their surface like those of sage, on very short petioles. Peduncles axillary, two inches long. It grew on Mount-Diablo.—*Sloane*.

4. CAMARA.

Periclymenum rectum urticæ folio, flore coccineo amplo.—Sloane, v. 2, p. 83. *Frutescens, foliis cordato ovatis, floralibus linearibus; floribus croceis, pedunculis longis.*—Browne, p. 268, L. 2.

Leaves

Leaves opposite, stem unarmed, branched ; flowers headed-umbelled, leafless.

Stem shrubby, a fathom in height, angular, somewhat rugged ; branches sub-divided, almost upright, rugged, quadrangular ; branchlets quadrangular, grooved, strict, hirsute, dark green ; leaves on long petioles, decussated, spreading, ovate, acuminate, serrate, nerved, hirsute. Flowers terminating ; peduncles shorter than the leaves, solitary, angular, grooved, hirsute ; bractes broad-lanceolate, concave, entire, pubescent. Calyx three-toothed, minute, the hinder tooth larger ; corolla funnel-form ; the tube and border at first pale sulphur-coloured, changing to saffron, light red, and pale crimson ; tube round at the base, gibbous, widening towards the throat ; border four-cleft ; nearly equal ; hinder segment almost upright, sub-cordate ; lower border, emarginate in the middle ; the lateral ones entire, spreading, waved at the edge ; throat contracted ; anthers minute, whitish ; germ oblong ; style shorter than the tube ; drupe the size of red currants, black green, with a nauseous smell ; nucleus two-celled.—*Swartz*. This has much the same virtues as sage but of a more active nature, containing as well as the following species a large share of resin.

5. INVOLUCRATA. INVOLUCRED.

Periclymenum rectum, salvia folio rugoso minore bullato, flore albo.—*Sloane*, v. 2, p. 81, t. 194, f. 2. *Frutescens, foliis cordato ovatis, floralibus orbiculatis ; floribus sub-carneis.*—*Browne*, p. 268, L. 3.

Leaves opposite, and tern, rhomb-ovate, blunt, wrinkled, tomentose ; stem unarmed, heads squarrose, bractes ovate.

Stem round, woody, branched, scarcely hairy, (*Sloane* says smooth and seven feet high). Branches opposite ; leaves petioled, scarcely crenate, membranaceous, rigid, less wrinkled than in the others above, nerved beneath, tomentose ; leaves seldom or never in threes ; peduncles short. Spikes rounded ; bractes large, sessile, cordate ovate, with six or more nerves running in right lines from the centre, all a little excavated their whole length, and tomentose ; calyx very small, whitish ; flowers of the same colour as the *trifolia*, but the yellow colour of the throat soon changes to white.

6. ACULEATA. PRICKLY.

Frutescens spinosa, foliis amplioribus subrotundo ovatis, pedunculis longissimis, floribus kermesinis.—*Browne*, p. 269, L. 4.

Leaves opposite, ovate, sub-cordate, softish underneath ; stem prickly ; bractes of the heads linear wedge-form.

Stem ten feet high, an inch and a half thick from top to bottom, armed with long, strong, reflex, prickles, or rather thorns, for they cannot be torn off without injuring the wood. Leaves ovate or cordate oblong, wrinkled rugged, crenate. Peduncles long with fewer and shorter prickles. Colour of the tube of the corolla red ; border lemon-coloured, changing into an orange and sometimes deeper colour.—*Medicus*. Drupe berried, soft, ovate, dark, very smooth, shining ; flesh pulpy, thin ; stone bony, like a grape seed, thick and blunt above, with two lateral lobules verging downwards, elongated below into a compressed conical beak ; three-celled, the two upper cells fertile, the lower void ; seeds single ob-ovate, remarkably acuminate downwards, compressed a little, white with a brown area at top.—*Gartner*.

WILD-SAGE.

VARRONIA.

CL. 5, OR. 1.—*Pentandria monogynia*. NAT. OR.—*Asperifolia*.

So named from Marcus T. Varro, the most learned of the Romans.

GEN. CHAR.—Calyx a one-leafed tubular perianth, five-toothed, teeth recurved, permanent; corolla one-petaled, tubular, cylindric; border five-parted, spreading; stamens five-awl-shaped filaments, length of the corolla; stigmas four, bristle-shaped; pericarp an ovate drupe, one-celled, inclosed by the calyx, free; seed a four celled roundish nut. Three species have been discovered in Jamaica.

1. LINEATA. LINEAR.

Periclymenum rectum salviae foliis majoribus oblongis mucronatis subtus villosis alternatim sitis flore et fructu minoribus.—Sloane, v. 2, p. 83, t. 194, f. 3. *Fruticosa foliis rugosis ovatis sub-hirsutis serratis alternis, capitulis subrotundis*.—Browne, p. 172, t. 13, f. 2.

Leaves lanceolate, marked with lines; peduncles lateral, growing to the petiole, spikes globular.

Browne says this plant seldom rises above three or four feet; Sloane describes it as a tree, with a whitish wood and blackish bark. The leaves are lanceolate, attenuated at both ends, on small pedicels, and indented about the edges, whitish underneath, where they are somewhat woolly. The branches are slender, crooked, and intermixed; the peduncles are axillary, supporting many flowers in bunches.

2. CURRASSAVICA. CURACOA.

Periclymenum rectum, salviae folio rugoso majore oblongo bullato, flore albo, fructu longiore.—Sloane, v. 2, p. 81. *Assurgens sarmentosa, foliis et capitulis oblongis*.—Browne, p. 172, V. 2.

Leaves lanceolate, spikes oblong.

Stem shrubby, a fathom in height, upright; branches and branchlets rugged ferruginous. Leaves petioled, ovate-lanceolate, rounded at the base, having a blunt point at the end, sub-serrate, nerved, wrinkled, rugged above, tomentose beneath. Spikes terminating, upright, an inch long. Peduncle short (on the branchlets) thick; flowers clustered, sessile, biggish, white; calyx inferior, bell-shaped, somewhat ventricose, slightly five cornered; corolla longer than the calyx; filaments from the middle of the tube, hirsute at the base, anthers ovate; style longer than the corolla, cloven to the middle, and the two segments cloven, thickish at the tip; drupe roundish, placed on the calyx and half covered by it, scarlet, one seeded.—Swartz. Sloane says the plant rises frequently ten or twelve feet, having a very handsome head, known in many parts of Jamaica by the name of *Jack in the bush*.

3. BULLATA. STUDDED.

Leaves ovate, veined, and wrinkled, spikes globose.

This is a shrub, a fathom in height, warted; with round rough-haired branches; leaves petioled, alternate, scattered, acuminate, doubly serrate, rugged; flowers clustered in little roundish balls; peduncles terminating and axillary, shorter than the leaves, rugged; corollas small, white, larger than the calyx, the five parts obtuse, crenate, erect; calyx bell-shaped; anthers whitish, bifid at the base; germ superior; drupe

drupe scarlet, one-seeded. Native of Jamaica in dry coppices near the sea, flowering in spring.—Swartz.

WILD-SENNA.—See BARBADOES FLOWER-FENCE.

WILD-SPIKENARD —See VERVAIN.

WILD-TAMARIND.

MIMOSA.

CL. 23, OR. 1.—*Polygamia monœcia*.

NAT. OR.—*Lomentaceæ*.

GEN. CHAR.—See Cacoons, p. 137.

ARBOREA.

TREE.

Acacia arborea maxima non spinosa, pinnis majoribus flore albo siliqua contorta coccinea ventriosa elegantissima.—Sloane, v. 2, p. 54, t. 182, f. 1, 2. *Fruticosa erecta inermis, cortice cinereo, floribus laxè conglobatis, spicis plurimis comosis terminatibus, foliolis minimis bipinnatis*.—Browne, p. 253, M. 9.

Unarmed, leaves bi-pinnate, pinnae halved, acute, stem arboreous.

There are two kinds of this tree, the red and the white, from the colour of their woods, which grow abundantly in most parts of Jamaica, and are considered good timber-trees. They are lofty spreading trees, with upright trunks, making a very graceful figure; the red kind has a rough dark-coloured, scaling, bark, the white smooth and ash-coloured: Swartz describes the red kind as follows "Branches diverging, bent down, smooth; partial leaves twelve-paired; universal petiole round, striated; ferruginous pubescent; partial petioles also ferruginous; glands roundish, concave, between the petioles; scalelets bifid, minute, at the base of the partial petioles; pinnae sixteen or eighteen paired, halved, subsessile, acute, entire, smooth. Spikes peduncled, sub-globular, composed of aggregate, sessile, white flowers: peduncles axillary, slender; corolla three times as long as the calyx, with a five-toothed border of a whitish flesh colour; filaments monadelphous, twice as long as the corolla, legume sub-cylindric, curved, twisted, red, four or five inches long; valve blood-red within; seed spherical, shining black." Both these trees make excellent boards, the red especially, which is beautifully grained, and takes so good a polish as to appear like mahogany; making a very handsome floor. The seeds are oblong, smooth, of a shining black colour, and appear when the pods open and become twisted, forming a beautiful contrast to its fine scarlet colour inside. Both these trees grow to the same size, and have much the same appearance, but the flowers of the white kind are yellow; the pods flat, jointed, twisted, and the seeds are hard, glossy, half white and half blue, making very beautiful beads. The foliage of the white is more dense than that of the red, and the timber is neither so hard nor so durable as the other. The leaflets of the white kind are broader and larger than those of the red and very differently shaped, being in the form of little, round-cornered parallelograms with a diagonal nerve, by which they are attached at one corner to the common pedicel; the largest nearly half an inch long and a quarter of an inch wide, from twelve to fourteen pairs; the pairs at the point and base are smaller and of an ovate figure. The leaflets of the red are one third more in the number of pairs on the

same space than those of the white, there being frequently twenty-four pairs on each common pedicel, they are ovate-lanceolate, about one-third of an inch long and one eighth broad at the base, tapering to a point. The leaves of both are alternate and consisting of from ten to twelve pairs of pinnæ, altogether about a foot long and nine inches broad.

See CACOONS, CASHAW, GUM-ARABIC, INGA-TREE, NEPHRITIC-TREE, SENSITIVE-PLANT.

WILD-TANSEY.

AMBROSIA.

CL. 21, OR. 5.—*Monœcia pentandria*. NAT. OR.—*Compositæ*.

GEN. CHAR.—Male flowers compound, common calyx one-leafed; corolla one-petaled, trifid, funnel-shaped; receptacle naked: Female calyx one-leafed, entire, the belly five-toothed, one-flowered; no corolla; nut of the hardened calyx one-seeded.

ELATIOR. TALL.

Ambrosia elatior foliis artemisiæ, atrovirentibus, asperis, odoratis, non lanuginosis—Sloane, v. 1, p. 125. *Erecta ramosa, foliis plurifariam divisis, laciniis crenato serratis, racemis paniculatis terminalibus*.—Browne, p. 339.

Leaves pinnatifid; racemes panicled, terminal, smooth.

This is an annual herbaceous plant, from two to three feet in height, upright, and branched; leaves bipinnatifid, with a very long point, nerved, wrinkled, somewhat hirsute. Racemes composed of opposite branches, from four to six inches in length, lax, rather erect. Male flowers more numerous, approximating, nodding; common perianth five-toothed, cup-shaped, with very minute florets in it; proper extremely small, five-cleft; corolla five-parted, the size of the calyx; with ovate acute segments; filaments five; anthers oblong; the rudiment of a pistil five or six smaller flowers in the ray, their calyx five-cleft, their corolla consisting of five linear petals, no pistil, germ, nor pericarp, but an upright, thick, pellucid style, with a pencil-shaped stigma. Female flowers fewer, sessile, from three to six, aggregate; no calyx except the minute lanceolate leaflets between the germs; germ oblong, angular, style two-parted, stigmas recurved, simple. Native of Jamaica, in barren, sandy, and rocky, situations, by river sides, in the southern part of the island, flowering from February to June. It has the appearance and taste of wormwood.—Swartz. A single plant has been observed to overspread a little rising bank of sand, twenty feet in diameter. It is common on the dry sandy banks of large river courses, where the mould is washed away by the floods: Browne says it is a powerful vulnerary and resolute in baths and fomentations. Barham gives this the strange name of *Oak of Cappadocia*, and speaks of it as follows. "It hath a strong, striated, woody, solid stem, as big as one's little finger, growing about three or four feet high. Its leaves are cut and divided just as mugwort leaves, but are a little larger; of a very dark-green colour above, but underneath more pale; and upon the top twig come out a great many small muscous flowers, of a yellow colour, set close together as in others of this kind. The fruit is an echinated or rough husk, just like the fruit of *tribulus*; and the seed is like grape-seed. The whole plant has a very strong smell,

smell, like the others of this kind. There is a notion of this herb, that if it be put under the sick's pillow, it foretells death if he sleep not. Boiled in *cergilim*, that is, sesamum and burnt wine, and applied to the part affected, it cures empyemas and abscesses of the stomach, before they ripen, especially if the juice be drank with honey; made into a plaister with horehound, it cures the cramp or spasm; with honey, eaten fasting, it cures the dropsy. The root, boiled in the above-said oil, takes out freckles or spots; boiled with cocoa-nut milk, it cures ulcers, and so doth the bark powdered and sprinkled upon them; it eases after pains."

WILD-WORMWOOD OR BASTARD FEVERFEW. PARTHENIUM.

CL. 21, OR. 5—*Monœcia pentandria*. NAT. OR.—*Nucamentacea*.

GEN. CHAR.—Common calyx a five-leaved simple perianth, spreading: Compound corolla convex; hermaphrodite corollets many in the disk; females five in the ray, scarcely surpassing the others: Proper corolla of the hermaphrodites one petaled, tubular, erect, smooth, five-cleft; females one-petaled, tubular, ligulate, oblique, blunt, roundish: Stamens in the hermaphrodites five capillary filaments, anthers thickish; the pistil has a germ scarcely observable, a filiform style, and two filiform stigmas; there is no pericarp, calyx unchanged: seeds in the hermaphrodites abortive; in the females solitary, turbinate-cordate, compressed naked; receptacle scarcely any, flat chaffs separate the florets, so that each female has two hermaphrodites behind.

HYSTEROPHORUS. CUT-LEAVED,

Sub-hirsutum ramosum, foliis multipliciter incis, floribus terminalibus.—Browne, p. 340.

Leaves compound-multifid.

This well known plant grows wild in almost every open field in Jamaica. Barham calls it Mugwort, and says "There is an herb in Jamaica called mug-wort, that grows in all or most of the poor grounds in America; nay, after a piece of ground is thrown up, being worn out by planting, commonly the first weed that appears is this. It is full of branches, which are covered with small white flowers; its leaves are very much jagged or ragged like rag-weed. In Jamaica it is called wild wormwood; the Spaniards call it *corbo santa*. I saw, in the year 1723, a very great cure performed upon a jew, who, after a fever and ague, had a violent inflammation and breaking out with sores on both his legs, which could not be cured by physic, nor any ointment in the apothecaries shops; at last he was advised to *corbo santa*, to make a bath of it, which he did, bathing twice a-day; and in three or four days he was perfectly well, all his sores healed up, and the inflammation gone, with the great pain that attended it. This I was an eye-witness to."—Barham, p. 106.

A case of the good effects of wormwood is related in the Columbian Magazine, for 1798, page 528. The trial of the bath was recommended to a mr. W——ms, who had long lingered under excruciating torments of a virulent breaking out over the loins and posteriors, which had baffled all the medicines of the shops. He was treated with the mugwort bath agreeable to dr. Barham's directions, and, on the third day's bathing, the most flattering symptoms took place, and in the course of a week or ten days, a perfect cure was effected. The scars however remained as a lasting proof of the virulence of the disorder, and the efficacy of the remedy.

Another writer in the same publication, after highly praising the virtues of this plant, states the following cases: "a negro man, much addicted to ardent spirits, worn down with venereal taints, and fraught with mercurial poison, had languished under the pains and penalties of a large and virulent ulcer on one of his legs, for the space of two years and upwards, without receiving any benefit whatever from the pills and plaisters of the doctor, or the regulations of his owner, who spared no expence or trouble to effect a cure, as he was a valuable servant. Notwithstanding all his endeavours the negro's habits of intemperance operated rather to extend and establish the case than otherwise; he was besides so neglectful of cleaning the ulcers that they became fly-blown, and their stench truly offensive. Thus circumstanced, recourse was had to the corbo santa; and with a success unparalleled! The ulcers were edged with fungous flesh, to which blue-stone water was applied; afterwards the corbo santa bath was resorted to; then the component leaves were bruised into a poultice and applied in the usual manner. His drink was lignum vitæ decoction; his food ground provisions; and he was interdicted spirituous liquors. After a trial of three days the most favourable symptoms appeared, and, in four weeks from the first application, the ulcers were perfectly healed and covered over. He continues sound and hearty without any return of eruption whatever. This account can be attested by many respectable persons. Another of my neighbours having had his housekeeper laid up with a white swelling, accompanied with an eruption of virulent pimples, in the knee, occasioned originally by a luxation or diffusion of the cap downwards, which caused intense pains, and exhibited symptoms, according to the doctor, of a highly dangerous nature, was prevailed upon to send her to town for a time, that the medicines might be regularly and conveniently administered, but after the stay of a month she was sent back as incurable, and in a much worse state than before she went. She remained for some days after her return in agony and despair, when fortunately the sovereign efficacy of the wild wormwood was mentioned, which was immediately procured, as it abounds every where, and its virtues tried, when the most favourable alteration took place, and the swelling and inflammation subsided, and the girl recovered to perfect health and strength."

WILLOW-HERB.

LYTHRUM.

CL. 11, OR. 1.—*Dodecandria monogynia.* NAT. OR.—*Calycanthemæ*

This generic name is derived from the Greek word for purple, on account of the colour of the flower.

GEN. CHAR.—Calyx a one-leaved, cylindric, striated, perianth, with twelve teeth alternately smaller; corolla six oblong petals, bluntish, spreading, with the claws inserted into the teeth of the calyx; stamens twelve filaments, filiform, the length of the calyx; the upper ones shorter than the lower; anthers simple, rising; the pistil has an oblong germ; style awl-shaped, the length of the stamens, declined; stigma orbiculate, rising; the pericarp an oblong capsule, acuminate, straight, two-celled or one-celled; seeds numerous, small. Four species are natives of Jamaica.

1. PARSONSIA. PARSONS.

Herbacea, foliis ovatis oppositis, floribus singularibus foliis ad alterutrum latus interpositis.—Browne, p. 199, t. 21, f. 2.

Leaves

Leaves opposite, oval; flowers alternate; six-stamened, sessile; stem diffused.

Roots filiform; stem prostrate or creeping, branched, round, slender, seldom exceeding ten or fourteen inches in length; branches only towards the top, simple, alternate, filiform, spreading, sub-flexuose, round, pubescent. Leaves small, oblong, acute, quite entire, smooth on both sides, nerved, on very short petioles. No stipules. Flowers axillary, especially at the top of the stem, solitary, small, pale red; calyx swelling a little at the base, oblique, smooth, the mouth having from six to ten teeth; petals waved; stigma slightly bifid, pubescent, white; capsule two-celled, opening by the calyx, being longitudinally cloven in front; seeds from four to six, fastened by a pedicel to the middle of the receptacle, roundish, brown. Native of Jamaica, flowering the whole year.—*Swartz*. This little plant grows pretty common in Clarendon-park and is sometimes found in the Savannas about Spanish-Town. It rises from a small fibrous root, and shoots in an oblique direction, but seldom exceeds ten or fourteen inches in length; the stalk is slender, and throws out a few small branches towards the top. The leaves are small and opposite, and the flowers rise single from the intermediate space between the leaves, on the one side or the other, but seldom or never in both. I have called it after *dr. Parsons*, who has published a treatise on the seed of vegetables, and many other curious remarks on different parts of Natural History.—*Browne*.

2. MELANIUM.

Herbaceum reclinatum, foliolis ovatis oppositis, floribus singularibus ad alas alternas.—*Browne*, p. 215.

Leaves opposite, ovate, flowers alternate, mostly ten-stamened, stem prostrate.

Stem about a foot high, sub-divided, ascending, roundish, rugged; leaves petioled, large, acute, quite entire, nerved, somewhat rugged; flowers peduncled, solitary, axillary, larger than those of the preceding species, purple. The calyx has from six to ten teeth; petals ovate, deciduous; filaments eight to ten, short, inserted below the middle of the tube; anthers cordate; stigma acute; seeds four to six, fastened to a pedicel, emitted by the bursting of the calyx, ovate, compressed; distinguished by the alternate situation of the flowers.—*Swartz*. But is not that circumstance common to this and the preceding sort? Native of Jamaica in cane-pieces. *Browne* says he found this vegetable among cane-pieces at Luidas, and says "it is a weakly plant, with a slender stem, well supplied with branches towards the top, and having a disagreeable sharp smell, which approaches much to that of guinea-hen weed, but more subtile, and less perceptible when placed close to the nose. The leaves and flowers are much like those of the *parsonsia*, as well as the disposition and make of the capsules, but that plant does not branch so much, nor has it any thing of this smell."

3. CUPHŒA.

Erecta foliolis oblongo-ovatis, oppositis; floribus spicatis terminalibus.
Browne, p. 216.

Leaves opposite, petioled, ovate-oblong, somewhat rugged, flowers twelve-stamened.

Root fibrous, annual. It has a delicate, slender stalk, round, upright, ten or twelve inches high, pubescent, purple; branches few, alternate, simple; the whole plant is extremely viscid or clammy all over. Leaves quite entire; flowers lateral, on very short peduncles, solitary, decumbent; calyx twelve-streaked, six-toothed, the upper tooth

tooth wider; petals unequal, the two upper ones larger; nectary a reflex scale, within the prominent part of the calyx; stamens twelve, unequal by insertion, eight coordinate and of the same shape, four smaller in two rows, the two upper ones villose; anthers roundish; capsule oblong, one-celled, covered by the calyx, cloven along with it, and then boat-shaped; the receptacle with the unripe seeds, coming forth and rising, in order to ripen the seeds in the open air.—*Linneus and Browne.*

4. CILIATUM.

CILIATE.

Leaves opposite, petioled, ovate, smooth, ciliated; racemes terminating, flowers mostly pointing one way, ten-stamened; stem shrubby.—*Sw.*

WINTER-BERRY.

PRINOS.

CL. 6, OR. 1.—*Hexandria monogynia.*

NAT. OR.—*Dumosa.*

GEN. CHAR.—Calyx six-cleft; corolla one petaled, wheel-shaped; stamens six filaments, with oblong anthers; the pistil has an ovate germ, ending in a style and obtuse stigma; berry roundish, six-seeded; seeds solitary. Swartz discovered one species in Jamaica.

MONTANA.

MOUNTAIN.

Leaves ovate-serrate, shining on both sides.

Trunk from twenty to thirty feet high, with an even brown bark; branches subdivided, almost upright, round, smooth; leaves alternate, acuminate at both ends, serrate on the whole margin, serratures remote, acute, nerved, smooth, an inch and a half long, stiffish, when dried of a dark livid colour. Petioles short, round, smooth. Peduncles axillary, solitary, shorter than the leaves, half an inch long, filiform, compressed a little, three-flowered or three-parted; pedicels one-flowered; flowers small, white: calyx six-cleft; segments small, ovate, convex; corolla divided almost to the base into six parts; segments ovate-lanceolate, spreading, bent back at the tip; filaments inserted between the divisions of the corolla; anthers roundish, bifid at the base; germ roundish, superior; style very short, thick, permanent; stigma sub-capitate, depressed; rolled back at the edge, sub-sexfid. Berry bluntly six-cornered, small, umbilicated with the stigma, black when ripe; seed oblong, compressed, shining black. Native of Jamaica in coppices on the highest mountains.—*Swartz.*

WINTER-CHERRIES.

PHYSALIS.

CL. 5, OR. 1.—*Pentandria monogynia.*

NAT. OR.—*Lurida.*

This generic name is derived from the Greek word for bladder, the calyx being much inflated.

GEN. CHAR.—Calyx a one-leaved perianth, ventricose, half five-cleft, small, five-cornered, with acuminate segments, permanent; corolla one petaled wheel-shaped; tube very short, border half five-cleft, large, plaited; segments wide, acute; stamens five awl-shaped filaments, very small, converging; anthers erect, converging; the pistil has a roundish germ, a filiform style generally longer than the stamens; and blunt stigma:

ma: the pericarp a sub-globular berry, two-celled, small, within a very large inflated, closed, five-cornered, coloured calyx; receptacle kidney-form, doubled; seeds very many, kidney-form, compressed. One species is a native of Jamaica.

ANGULATA. ANGULAR.

Solanum vesicarium erectum, solani vulgaris foliis.—Sloane, v. 1, p. 238. *Herbacea major, foliis et fructibus singularibus, ad divaricationes superiores.*—Browne, p. 176.

Very much branched, branches angular, smooth; leaves ovate, toothed.

Stem straight, the thickness of the little finger, three-cornered below, four-cornered above, as are also the branches, which come out obliquely from top to bottom in alternate order, and are thicker at the base. Lower leaves wider and rounder than those about the middle of the stem; and these larger than those of the branches, deeply toothed or jagged, like those of common goose foot, smooth. Flowers five-cornered, of an extremely pale yellow colour, with spots of a darker yellow at the base; stamens short, purple, with oblong anthers of a dusky blue colour. Calyx of the fruit swelling, pendulous, oblong at first, but rounder afterwards, green, frequently streaked with dark purple at the angles, which are so little apparent in this species that the bladder seems to be roundish. The fruit, when ripe, fills the bladder and bursts it; the stem and leaves smell disagreeably when handled.—*Dillenius*. The stem is hollow, rising three feet high; the leaves have inch long footstalks; peduncles half an inch long; bladders red. It grows by the Rio-Cobre, in wet places about the town. The fruit is eaten, and tastes like European winter-cherries.—*Sloane*. This plant is common in most of the low and moist lands of Jamaica. It has a shady foliage, and always bears a simple leaf and flower, or either of them, at each of the upper divisions of the plant. The berries have been generally looked upon as diuretic; and may be deservedly esteemed so in over-heated or febrile habits, for they have a gentle sub-acid taste, joined with a light bitter, which render them very agreeable to the palate in most inflammatory cases. The fumes of the plant while yet pretty succulent, burnt with wax, and received into the mouth, has been observed to kill the worms in and about the teeth, and to ease the tooth-ache.—*Browne*.

WINTER'S-BARK.—See CINNAMON, WILD.

WOLF'S-CLAW.

LYCOPODIUM.

CL. 24, OR. 1.—*Cryptogamia miscellanea*. NAT. OR.—*Musci*.

GEN. CHAR.—Fructifications in the axils of the scales, digested into oblong imbricate spikes or of the leaves themselves, sessile. Capsule kidney-shaped, two-valved, elastic, many seeded. Veil none. Four species have been found in Jamaica.

1. DICHOTOMUM. DICHOTOMOUS.

Ramosum erectum maximum, foliis setaceis patentibus.—Browne, p. 84.

Leaves scattered, linear-acuminate, open, stem declined, assurgent, forked; branches spreading; fructifications scattered.

The

The large club-moss or wolf's-claw is a mossy plant frequent in all the mountainous and shady parts of Jamaica; it throws out a good many strong branches, rising commonly from one to four feet, but is apt to lodge when it grows so luxuriantly, and then shoots many smaller roots from every part of the trunk and branches that lie contiguous to the ground.—*Browne*.

2. PLUMOSUM. PLUMED.

Selago, 1. *Ramosum repens et radiculosa, spicillis quadratis*.—*Browne*, p. 83.

Leaves two-rowed, imbricate, gibbous one side at the base; superficial ones semi-ovate, ciliate, with a small tip; shoots nearly erect, forked; spikes terminal, sessile, square.

3. TAXIFOLIUM. YEW-LEAVED.

Leaves scattered, eight rowed, linear-lanceolate, flat, quite entire, spreading; stem erect, forked.—*Sw*.

4. SQUARROSUM. SQUARROSE.

Leaves sub-verticillate, every where reflected, inferior, squarrose, rigid; stem forked, pointed; capsules scattered.—*Sw*.

WOOD-SORREL.

OXALIS.

CL. 10, OR. 5.—*Decandria pentagynia*. NAT. OR.—*Gruinales*.

GEN. CHAR.—Calyx a five-parted perianth; corolla five-parted; stamens ten capillary filaments with roundish anthers; the pistil has a five-cornered germ, and five styles with blunt stigmas; the pericarp a five-celled, five-cornered, capsule, opening at the corners; seeds ariled. One species is a native of Jamaica.

STRICTA. STIFF.

Trifolium acetosum corniculatum luteum minus repens et etiam procumbens.—*Sloane*, v. 1, p. 18. *Caule erecto ramoso, pedunculis multifloris*.—*Browne*, p. 231.

Stem upright, leaflets ob-cordate, peduncles umbelliferous, petals quite entire.

Root perennial, creeping, round, putting out capillary fibres at the knots, branched. Stems from the root as it creeps along several, roundish, slender, somewhat villose, purplish, finally branched, half a foot high and more, upright, but being weak often lying down, annual. Leaves alternate, a few sometimes opposite, ternate. Petiole springing from a joint, margined in front, round, villose, spreading, from two to four inches long, flaccid; leaflets sub-petioled, somewhat hirsute on both sides, with decumbent hairs, and green, ciliate, scarcely half an inch long. Peduncles axillary, jointed at the base, round, villose, upright, about the same length with the leaves, having from two to seven flowers in an umbel, with a pedicel often branched; leaflets of the involucre several, ciliate, and somewhat hirsute. Calycine leaflets lanceolate, sharpish, somewhat hirsute, ciliate, pale green, erect; corolla twice or thrice as long as the calyx, sub-campanulate, yellow; claws upright, border ob-ovate, very obscurely emarginate and very spreading; filaments

filaments connate in a cylinder; interior toothless, equal, having a very few capitate hairs at top, in other parts smooth; outer smooth; anthers oblong, incumbent, yellow; germ oblong, hirsute, pale green; styles almost equal, hirsute with simple hairs; capsule columnar, sharpish, hirsute, five-cornered. Swartz observes that it varies with a stiffer and weaker stem, upright or declining. It is very common in every part of Jamaica, and from the form and manner of growth of its leaves is frequently called Three Hearts shrub. The whole plant has an agreeable acid taste; Sloane says the juice takes out spots in linen. Bruised and mixed with a little fine salt, and the juice squeezed through a fine rag, it will take off films, funguses, or proud flesh, from the eye, if two or three drops are dropped in twice a-day, which assists in clearing the sight. Browne says it is a pleasant cooler and diuretic (in decoction or as a salad) formerly administered in inflammatory cases; and which may be ordered in cooling and other diluting infusions.

WORM-GRASS.

SPIGELIA.

CL. 5, OR. 1.—*Pentandria monogynia*.NAT. OR.—*Stellata*.

This was so named in honour of Adrian Spigelius, professor of anatomy and surgery at Padua.

GEN. CHAR.—Calyx a one-leaved perianth, five-parted, acuminate, small, permanent; corolla one-petaled, funnel-shaped; tube much longer than the calyx, narrowed below; border spreading, five-cleft; segments wide, acuminate; stamens five simple filaments, with simple anthers; the pistil has a germ composed of two globes, superior; style awl-shaped, length of the tube; stigma simple; the pericarp a twin capsule, two-celled, four-valved; seeds numerous, very small. There are only two species, one of which is cultivated in Jamaica, and is thought to have been originally imported from the Spanish main.

ANTHELMIA.

Quadriphylla, spicis terminalibus et e centro frondis.—Browne, p. 156, t. 37, f. 3.

Stem herbaceous, uppermost leaves in fours.

This is an annual plant with a fibrous root, from which arises a strong, erect, herbaceous, hollow stalk, a foot and a half high, channelled, sending out two side branches opposite near the bottom, and a little above the middle four acute-pointed leaves, placed in form of a cross; these and also the principal stalk, have four smaller leaves near the top, placed round in the same manner as the others; and from these arise short spikes of herbaceous flowers, ranged on one side of the footstalks, which are succeeded by roundish twin capsules, containing small seeds.—*Martyn's Dictionary*.

This vegetable has been long in use among the negroes and Indians, who were the first acquainted with its virtues; and takes its present denomination from its peculiar efficacy; which, I dare affirm, from a great number of successful experiments, it does in so extraordinary a manner, that no other simple can be of equal efficacy in any other disease as this is in those that proceed from these insects, especially when attended with a fever or convulsions. The method of preparing this medicine is as follows: viz. you take the plant roots and all, either fresh gathered or dry, two moderate handfulls, and boil them over a gentle fire in two quarts of water, until one half of the liquid is

consumed ; then strain off the remainder and add a little sugar and lemon juice, to give it a more agreeable taste, and keep it from growing viscid or clammy. It may be, however, observed, that the decoction is sometimes clarified, and sweetened, and is then equally efficacious ; which gives a hint to have it made into syrup. The common method of administering this medicine is to a full grown person half a pint at the hour of rest, and a proportionate quantity to all weaker and younger subjects, which is to be repeated once in twenty-four hours, for two or three days after ; but as the largeness of this dose may render its operation too violent, and the use of it both unsafe and precarious, I would recommend the following method as less hazardous and as effectual : Give about four ounces to a full grown person for the first dose, and about two or three every six hours after, if its anodyne quality will permit, but to persons of a weaker constitution, it should be repeated only every ten or twelve hours ; this is to be continued for the space of thirty-six or forty-eight hours, when the double dose may be again repeated ; and after this takes its full effect, it must be worked off with some gentle purgative, such as the infusion of senna or rhubarb, with manna, &c. This medicine procures sleep almost as certainly, and in an equal degree with opium, but the eyes seem distended, and appear bright and sparkling, as they generally do before the eruption of the small pox and measles, after the sleepy effects are over. In a short time after this first dose is administered, the pulse grows regular and begins to rise ; the fever cools ; the convulsions, if any, abate ; all the symptoms appear more favourable ; and the worms are generally discharged in great quantities, by the use of the subsequent purgatives, if not before ; often above one hundred at a time ; but, when a few only come away, and those alive, which seldom is the case, the dose must be again repeated, and this scarcely ever fails. I never knew the medicine ineffectual when there was the least probability of success ; nay, I have often found it serviceable when there was not the least reason to expect it ; I have been however cautious in ordering it for children ; for, though I never knew it at all hurtful, its effects upon the eyes are such as frequently deterred me, especially as their fibres are weakly and more sensible of irritation, and the fevers arising from this source, on such subjects, seldom so violent as to hinder the administration of some other medicines that may prove equally as effectual when the symptoms are not too urgent — *Browne*. Granger observes that this powerful vermifuge, incautiously administered, has proved mortal. In *Dancer's Medical Assistant*, the infusion of the herb is recommended, dose two table-spoonfuls to children four or five years old : expressed juice, one table-spoonful to the same ; and it is observed that too large doses are narcotic and dangerous, and should never be given to children under two years old. The Cowitch therefore seems to be a much more innocent, and equally powerful worm medicine, consequently in almost every case deserving of preference.

WORM-WOOD.

ARTEMISIA.

CL. 19, OR. 2.—*Syngenesia polygamia superflu* NAT. OR.—*Compositæ*.

GEN. CHAR.—Common calyx roundish, imbricate ; receptacle sub-villose, or almost naked ; no down ; no corolla of the ray.

ABSINTHIUM.

Leaves compound, multifid ; flowers sub-globose, pendulous ; receptacle villose.

This

This plant was first introduced to Jamaica from Europe, and has since been cultivated in most parts of the island, but thrives best in the mountains, where it is often observed to grow as luxuriantly as in most provinces of Europe. It yields an active lixivial salt, an oil, and a conserve, which are commonly kept in the shops; and is a principal ingredient in a compound water, to which it gives its name. It is a wholesome bitter, and much used as a stomachic, in vinus and other infusions.—*Browne*. Wormwood is a moderately warm stomachic and corroborant. An infusion of the leaves, with the addition of fixed alkaline salt, is a powerful diuretic in dropsical cases. It is used as a vermifuge; for which purpose it is both applied to the belly, and taken in pills made with crumb of bread. This plant powerfully resists putrefaction, and is made a principal ingredient in antiseptic fomentations. The ashes of wormwood afford a more fine alkaline salt than most other vegetables excepting bean stalks, broom, and the larger trees. Clothes are preserved from moths by laying bundles of dried wormwood among them. The wormwood, like all plants, is fullest of juice while in the shoot, but fullest of virtue when they have their seeds on them.

WOUND-WORTH.

AMELLUS.

CL. 19, OR. 2.—*Syngenesia polygamia superflua*.

NAT. OR.—*Compositæ*.

GEN. CHAR.—Calyx imbricate; corollets of the ray undivided; down simple; receptacle chaffy. One species is a native of Jamaica.

UMBELLATUS.

UMBELLED.

Solidago.—*Villosa incana; foliis ovatis oppositis, caule assurgenti, sub-nudo, tripartito; floribus sub-umbellatis*.—*Browne*, p. 320, t. 33, f. 2.

Leaves opposite, three-nerved, downy underneath, flowers umbelled.

This has an herbaceous upright, simple, round, hairy, stem, two feet high, or at most two feet and a half; leaves at first radical (afterwards the stem is naked at bottom) petioled, wedge-shaped at the base, somewhat decurrent and serrate, nerved, smooth, dark green, white and soft beneath; upper stem leaves on short petioles, smaller. The stem towards the top is generally divided into three branches, each of which is subdivided into many small flower-branches, forming a sort of umbel. The umbelules have from three to eight flowers, with linear leaflets, from two to four, under them. Peduncles an inch long, each sustaining one large yellow flower; scales of the calyx lanceolate, membranaceous, hoary; hermaphrodite corollets fewer in the disk, funnel-shaped, with a reflex border; females in the ray numerous, linear, blunt, bifid; seeds to all the flowers ob-conical; down sessile, simple, hairy; receptacle hirsute not bristly. It has the habit of *tussilago*, and would be of that genus if the down were stipitate, and the receptacle naked.—*Swartz*. This beautiful and uncommon plant is a native of the cooler woods and mountains; its taste is acerb, and it should be a fine vulnerary; it leaves a sweetening on the palate, not common in plants of this class. The leaves are pretty large, growing chiefly at the bottom of the stalk.—*Browne*. It flowers in summer.

XIMENIA.—See SEASIDE-PLUM.

Q q 2

YAMS.

YAMS.

DIOSCOREA.

CL. 22, OR. 6 — *Diœcia hexandria*.NAT. OR. — *Sarmenlaceæ*.

So named in honour of Pediculous Dioscorides, supposed to have lived in the time of Nero, and author of a Treatise on the Materia Medica.

GEN. CHAR. — Male calyx a one-leaved bell-formed perianth, six-parted; divisions lanceolate, spreading at top: no corolla, unless the calyx; stamens six capillary filaments, very short, with simple anthers: Female calyx a perianth as in the male; no corolla; the pistil has a very small three-sided germ, three simple styles, and simple stigmas; the pericarp is a large triangular capsule, three-celled, three-valved: Seeds in pairs, compressed, girt with a large membranous border.

1. SATIVA.

CULTIVATED.

Volubilis nigra, radice tuberosa compressa maxima digitata farinacea esculenta folio cordato nervoso.—Sloane, v. 1, p. 140.

Leaves cordate; alternate; stem even, round.

- X This is commonly called negro yam, which has a round, smooth, slender, climbing, stem, rising to the height of fifteen or twenty feet, when supported, the lower part of the stem somewhat prickly; the leaves cordate, having three, four, or five, longitudinal veins, they are alternate, dark green above, paler below, and rise from pretty long round footstalks, from the base of which come the branching spikes of flowers, which are small; the capsule is ob-ovate, leathery, three-sided, compressed into three wings, accompanied in the middle with a very narrow partition, to the inner edge of which the seeds are fixed; these are irregularly triangular or roundish, and of a brownish red colour. The roots of this vine grow to a very large size, frequently weighing ten or eleven pounds, and form a very valuable article of food either boiled or roasted. There are two kinds of negro yam, known by the names of cassada-yam and man-yam, the latter is considered the best, as being of a mealier better taste, and drier texture, but is not so productive; it is easily distinguished from the former by the stringy fibres which overspread its skin, which is smooth on the cassada-yam. The inside of both these yams is white, of a viscous or clammy nature; when roasted or boiled they are meally like a potatoe but of a closer texture, they are a very pleasant and nourishing food, in much esteem among the negroes. When this yam is dug, a small piece of the top is cut off and left upon the vine, which is carefully moulded up, and in three months it produces another yam, commonly called the head, from which the plant is propagated, by cutting it into pieces, taking care to leave an eye on each cutting, by which they germinate. These are planted on little hillocks of earth dug about two feet distant from each other, generally two plants in each hillock, from January to April, and the yams are fit for digging in August, September, and October. In each hillock a pole is planted six or eight feet long, for the vine to run upon, and a field of them has much the appearance of a hop-garden. Unless the vine be supported it is thought that the yam will be dwarfish. These yams will not keep for any length of time out of the ground, and should therefore be only dug as they may be wanted for use.

- X There is a variety of this species which grows wild in many parts of Jamaica, and common in Liguanea mountains; the root of which is so bitter as to prevent its being eaten, unless in cases of great necessity. It is yellow within, of a depressed form, having its edges dented as it were.

2. ALATA.

2. ALATA. WINGED.

Polubilis nigra, radice alba aut purpurea maxima, tuberosa, esculenta, farinacea, caule membranulis extantibus alato, folio cordato nervoso.—
Sloane, v. 1, p. 139. *Foliis cordatis caule tereti aculeato bulbifero.*—
Browne, p. 359.

Leaves cordate; stem winged, bulb-bearing.

This is called the white or bockra-yam, and has a square stem, climbing like the former, having at each corner a pale reddish membrane. Leaves in shape resembling those of the others, but opposite and much larger in every respect, alternate, on long square membranaceous petioles; three or four large nerves on each side the midrib, with transverse veins between them. Peduncles axillary, an inch or more in length, with small flowers of a yellowish green colour. This is propagated by cutting the yam into pieces, taking care to leave a piece of the skin on each piece; and planted in the same manner as the negro-yam, they may be planted from April to June, and are fit to dig in January and February. They are a much more delicate and agreeable food than the other, and, on account of their lightness and easy digestion, are preferred to bread by many inhabitants of the West-Indies. There are several kinds of them, distinguished principally by the size and shape of the roots; all of which, if well dried in the sun, and covered with ashes, will keep well in a dry situation for many months. Care however should be taken not to bruise or wound them in digging, if they are intended for keeping any time; although these wounds soon heal up and harden, if covered with ashes and exposed to the sun, when they will keep as well as the others. In packing them, ashes should be strewed between the layers. They are generally known by the name of white-yam, from the superior whiteness of their inside.

The red or purple yam appears to be only a variety of the white, the stems, leaves, and manner of growth, being exactly similar; only that the whole of them have a reddish colour. The yam is also of a light purple colour inside, and the skin deep purple. This also keeps equally well with the white kind, but is of a coarser texture, though of an agreeable saccharine taste. It is very productive, and bears well on shallow or marly soils, whereas the other requires a rich deep mould.

3. TRILOBA. THREE-LOBED.

Leaves three-lobed, stem smooth.

This is known by the name of Indian Yam in Jamaica. Stem square, membranaceous; leaves three-lobed, the middle lobe the largest, they are alternate on long winged pedicels. This is the smallest and most delicate of all the yams; it seldom exceeds eight or nine inches in length and two or three in diameter, but generally smaller; they are planted from cuttings, which are very productive, each plant producing five or six yams, or even more, branching from the plant on all sides in a circular order, they are of a purplish colour outside, and have a pleasant sweetish taste, very agreeable to most palates. They do not keep well.

4. ACULEATA. ACULEATE.

Leaves cordate, stem prickly.

Stem prickly, twining, round, much branched; leaves broad, round heart-shaped, acute-pointed, pale green; leaves three-nerved on each side, all the nerves proceeding

X in a more arched direction than in the others from the footstalk to the point of the leaf; they are sometimes opposite, sometimes alternate, on long round pedicels. This yam is called the Afou yam, which is planted and bears at the same time as the white, also from cuttings; it is of a smaller size and its inside is of a yellow colour, and fine dry mealy texture; its skin has a bitter taste which slightly pervades the whole yam; this does not keep well out of the ground.

5. OPPOSITIFOLIA. OPPOSITE-LEAVED.

Leaves opposite, ovate, acuminate.

X Stem round, smooth, twining; leaves cordate, acuminate, opposite, petioled; flowers androgynous; calyx one two or three subulated squammæ; corolla six-subulated, patent, erect, petals, arising from the margins of the germ, and three times the length of the stamens, which are six short subulated filaments, with adherent didymous globose anthers; the styles are three, patent, reflex, sulcated; germ oblong and trigonal, with a rib at each angle. This is called Guinea Yam, from the plants having been first brought from Africa; it bears a yam much resembling the negro yam in taste and consistence.

6. BULBIFERA. BULB-BEARING.

Leaves cordate, stem even, bulb-bearing.

X Stalks slender, somewhat woody, twining, smooth; leaves cordate, opposite, on long petioles; flowers androgynous. The negroes call this kind *Accm*, and they cultivate it on account of the fruit it bears on its stems; which is very irregularly shaped, of a brown colour, rough skin, about the size of Irish potatoes, which it much resembles in taste, either roasted or boiled.

It is thought that all these species of dioscorea have been originally imported into Jamaica, with the exception of the wild variety of the sativa, which is the only one found in the island not in a state of cultivation. They now form a principal article of food for all classes. Barham says the juice of the leaves is good against the stings of scorpions; and that they make a good fomentation for ulcers.

YAW-WEED.—See INDIAN-MULBERRY.

YELLOW-BALSAM.—See WILD-ROSEMARY.

YELLOW-SANDERS.

HUDSONIA.

CL. 11, OR. 1.—*Dodecandria monogynia*. NAT. OR.—*Bicornes*.

This genus was so named in honour of William Hudson, author of *Flora Angelica*

GEN. CHAR.—Calyx three or five-leaved, three-parted, tubular; no corolla; stamens fifteen, anthers roundish; capsule one-seeded, three-valved, three-seeded; seeds rounded angular.

ARBOREA. TREF.

Cucurbitifera arbor forte, foliis sub-rotundis confertim nascentibus, ramulorum extremitatibus tumidis.—Sloane, v. 2, p. 176, t. 228, f. 3.

Leaves ob-ovate, thick, fleshy, terminal, peduncles solitary; flowers in globose racemes.

This

This tree was made a species of *Hudsonia* by Mr. Anthony Robinson, although it appears from the following description, in his manuscript, to belong to the class *decandria*; he calls it *Yellow-Saunders* or *Mountain Wild Olive*. "Calyx a campanulated perianth, obscurely quinque-dentated, inferior, deciduous; there is no corolla; the stamens are ten filaments, subulate, alternately shorter, inserted into the base of the calyx and scarcely longer than it; anthers didymous, oblong, erect; the pistil has an inferior oblong germ, subulate style, as long as the stamens, and acute stigma; the pericarp is a sub-ovate smooth drupe, six-angled, unilocular; the seed an ovate-oblong nut, furrowed hexangular. The negroes of Liguanea call this tree *Negressee*, and use the decoction of its bark to cure venereal taints. It is a beautiful arborescent, and grows to the height of sixty or seventy feet, covered with an ash-coloured bark, somewhat rugged. The branches spread horizontally and terminate in slender twigs, which are divided into a dichotomous or trichotomous manner. At their extremities are placed divers leaves, close together, of an oblong ob-ovate form, upon short pedicels, of a shining yellowish green above, little or nothing glossy beneath. In July, the buds in the centre of the leaves, which are of an elegant russet, covered with a down of the same, begin to germinate, and, as these increase, the old leaves and fruit drop gradually off, and leave a tuberculated part in the twig, on which remains the vestige of the leaves. Immediately above this, below the new leaves, are produced from two to four simple peduncles bending downward, placed vertically from half an inch to three-quarters of an inch in length, covered with the same kind of down. At the extremities of these grow many very small flowers, which, before the cups are open, look not unlike a small green black berry. The cups which form the cluster being round, smooth, and placed close together, yet each is set on a very short peduncle, at whose base is a trifid bractea or stipule, covered with down externally, but concave and smooth in the inside, where it embraces the peduncle. The fruit is a drupe, the pulp has a bitter astringent taste; the bark is also bitter, astringent, with something balsamic intermixed. The blossoms appear the latter end of August, and the fruit continues all the year, till thrown off by the young buds, it is of a dull yellow colour, marked with six angles, the shell very thick, hard to break, and marked with the same numbers of ridges and furrows as the fruit. It appears by its make and taste to approach nearly to the *Yellow Myobalanus* of the shops. It nearly approaches the *Buceras* of Browne, which Linneus calls *Bucida*. It agrees nearly with the characters of *Bucida*."

The wood of this tree is of a yellow colour, is durable, and has a close smooth grain, which takes a good polish; it is frequently used to make bedsteads and other furniture.

See OLIVE-BARK.

YELLOW-THISTLE.

ARGEMONE.

CL. 13, OR. 1.—*Polyandria monogynia*. NAT. OR.—*Rhæadææ*.

GEN. CHAR.—Calyx a three-leaved roundish perianth, leaflets roundish with a point, concave, caducous; corolla six roundish petals from erect spreading, larger than the calyx; stamens numerous filiform filaments, the length of the calyx, with oblong, erect, anthers: the pistil has an ovate, five-angled germ; no style; stigma thickish, obtuse, reflex, quinquefid, permanent; the pericarp an ovate capsule, five-angled, one-celled, half-valved; seeds numerous, very small; receptacles linear, fastened

fastened to the angles of the pericarp, not gaping. One species is a native of Jamaica.

MEXICANA.

MEXICAN.

Papaver spinosum.—Sloane, v. 1, p. 196. *Spinosum succo luteo turgidum*.—Browne, p. 244.

Capsules six-valved, leaves spiny.

This is an annual plant, rising to the height of one or two feet, the root small and fusiform; the stem is cylindric, aculeated, prickled, and sends out alternate branches. Leaves sinuate or jagged, soft, shining, stem-clasping, the points of the jags ending in sharp yellow spines; on the upper side are milky veins, on the under are small prickles along the midrib and veins. Flowers solitary, at the ends of the stem and branches; corolla of a beautiful yellow colour, with from four to six petals; the calyx consists of two or three prickly leaves; stigma capitate, small, with five notches, or as it were reflected back into five divisions; capsule superior, pentagular, prickly, having five or six ribs, open at top, with a hard thread-like substance proceeding from its angles, and all united at the summit; seeds very numerous, small, round, black, rough, or like network, with a compressed scar on one side. This plant grows wild in every part of Jamaica, and is common in the streets of Kingston and Spanish-Town. All parts of the plant abound with a milky glutinous juice, of a fine bright yellow colour, turning black when exposed to the air, and which reduced to a consistence is hardly distinguishable from gamboge; for which reason Long supposes it may probably have equal efficacy in dropsies, jaundice, and cutaneous eruptions. Browne says the juice is esteemed very detersive, and generally used in diseases of the eyes; and the infusion looked upon as a sudorific and resolute, which may be used with success on many occasions. The seeds are said to be a stronger narcotic than laudanum. Browne observes that they are thought to be an excellent remedy, and frequently administered, in diarrhoeas and bloody fluxes. They have a pungent taste, which does not manifest itself for some time upon the palate, and work both by stool and vomit, and have been often administered in the dry belly-ache; but we have much safer and better medicines for both these disorders, though this may be given with success, when the parts are relaxed or weakly, or the disorder proceeds from indigestion.—*Browne*. Long remarks that the seeds might, on some occasions, be used by smoaking, after the manner of tobacco, and produce the same effects as opium, which some stomachs cannot bear in the smallest dose. A decoction from the leaves of the flower has been recommended for throwing out and filling the pustules of the small-pox; it is likewise given in fever to promote perspiration. A decoction of the leaves is considered as a good application for abating inflammations in the eyes, and is used with success in bathing ulcers, which are cleaned and healed thereby. Sweetened with sugar, and drank warm, this decoction affords immediate ease in stranguries arising from the effects of blisters. The leaves bruised and a few drops of lime-juice sprinkled on them is a good cataplasm for ulcers. Barham speaks of the qualities of this plant, as follows: "The whole plant is milky, but of a yellow colour; which, mixed with woman's milk, and dropped into the eye, clears the sight, and takes off spots or films: It may be for this reason it is called *argemone*. It also wastes fungusses or proud-flesh. The distilled water, with the tops of wild tamarinds, makes a good eye-water. The fruit or head is called *figo del inferno*, or *ficus infernalis*, and well it may, for it contains seeds enough to send any that should take them wilfully to *inferno*, being much stronger than any opium, as was lately discovered in Jamaica in the following

ing manner : A negro man who had ran away some time from his master, lived by stealing of stock ; one night he came to a sheep-pen, where there was only a poor old negro man to look after it, to whom he said, he must have a sheep to-night ; the old man not being able to resist him, gave him good words, and asked him to smook a pipe, which he filled for him, putting in a quantity of the seeds of this plant, and, before he had smoked out his pipe, he fell into a sound sleep, not easily to be awakened ; upon which, as the old fellow knew very well the effect, he ran to a neighbouring pen, and getting ropes and assistance, they secured him before he was thoroughly awake ; and when he was, he cursed and swore, saying the old fellow was an *obeah* man and had bewitched him. I saw a fat steer drop down dead of a sudden, fetching two or three staggers, foamed at the mouth, and died immediately : I ordered them to cut his throat ; and, after opening him, in his stomach were found several handsfull of the seeds of this plant, which I supposed killed him."—*Barham*, p. 152.

The late dr. Affleck, who frequently administered this medicine, in the course of his practice, with great success, says in a letter to a friend " Dr. Barham's description of the virtues of the poppy is different to what I have experienced. About twenty years ago a gentleman of the faculty had a severe attack of the dry belly-ache : after using several medicines to little purpose, he desired an emulsion to be made with two drachms of the poppy-seed, eight ounces of water, and a little sugar, of which he took a table spoonful every half-hoar, after the third dose the violent pain and retching abated, the fifth dose brought on a composed sleep for two hours, succeeded by a plentiful evacuation, about that time the dry belly-ache disappeared. Ever since I have used it in complaints of the bowels, and found it a safe and mild purge, and kept it in the shop under the title of *Papaver Errat. American.*"

ZEZEGARY.—*See VANGLO.*

ing manner: A negro man who had run away some time from his master, lived by stealing of stock; one night he came to a sheep-pen, where there was only a poor old negro man to look after it. To whom he said, he must have a sheep to-night; the old man not being able to resist him, gave him good words, and asked him to smoke a pipe, which he filled for him; putting in a quantity of the seeds of this plant, and before he had smoked out his pipe, he fell into a sound sleep, not easily to be awakened; upon which, as the old fellow knew very well the effect, he ran to a neighbouring pen, and getting ropes and lanterns, they secured him before he was thoroughly awake; and when he was, he came and wept, saying the old fellow was an honest man and had bewitched him. I saw the story drop down dead of a sudden, fetching two or three stragglers, formed at the mouth, and died immediately: I ordered them to cut his throat; and, after opening him, in his stomach were found several handfuls of the seeds of this plant, which I afterwards killed him. — *Barbados, p. 152.*

The late Dr. Aitcock, who frequently administered this medicine, in the course of his practice, with great success, says in a letter to a friend "Dr. Barbados's description of the virtues of the poppy is different to what I have experienced. About twenty years ago a gentleman of the island had a severe attack of the dry belly-ache: after using several medicines to little purpose, he desired an emulsion to be made with two drachms of the poppy-seed, with ounces of water, and a little sugar, of which he took a table spoonful every half hour, after the third dose the violent pain and itching abated, the fifth dose brought on a composed sleep for two hours, succeeded by a plentiful evacuation, about that time the dry belly-ache disappeared. Ever since I have used it in complaints of the bowels, and found it a safe and mild purge, and kept it in the shop under the title of *Purging Syrup Jamaican.*"

KEPNEY—JACVANGIC.

from its other end and displays the leaves. The tree is often seventy feet high. The flowers are frequently five-angled, and the stamens are connected towards the base; the outer ones are largest, decreasing to the inner edge. The branches grow very upright and are low in number; the leaves are also low, agreeable to an old observation that the larger the leaves the lower they are; and no tree has larger or lower leaves than this.

OMISSIONS AND ADDITIONS.

VOLUME FIRST.

102. **PAGE 7**—After the article *ADENANTHERA*, insert, “This is known by the name of *Grand Anther* or *False Flower Fence*: In Jamaica, where it has been pretty generally cultivated, and has thriven well, it has been called *Circassian pea-tree*, from the beauty of the pea, of which necklaces are made, which, on the trees first producing fruit in Jamaica, sold for a very high price.”

Page 9.—After the article *AKEE*, insert, “The method of dressing the white lobes of the Akee is to lay them a few minutes in salt and water, then scalding them in boiling water, and frying them with butter. They are also a pleasant and wholesome ingredient in soup. The negroes in Guinea eat the fruit raw. The husk lathers and washes like soap.”

The following plant, discovered in Jamaica by Swartz, should have followed the Akee:

No English Name.

ALCHORNEA LATIFOLIA.

CL. 22, OR. 13.—*Diaccia monodelphia.*

This was so named after Mr. Stainsby Alchorne, apothecary of London.

GEN. CHAR.—Male calyx a three or five-leaved perianth; leaflets ovate, concave, equal, coloured, deciduous: no corolla: Stamens eight equal filaments, scarce longer than the calyx, slightly connate at the base; anthers ovate, upright; pistil a rudiment. The female calyx is a one-leaved perianth, four or five-toothed, teeth equal, small; no corolla; the pistil has a superior twin germ, two very long filiform styles, with simple acute stigmas; the pericarp is a berried capsule, two-seeded, two-celled, two-valved; the seeds are solitary, large, oblong.

Page 20.—After the article *ANCHOVY-PEAR*, insert, “The wood of this tree has been found to split easily and to make good light staves and heading for sugar hogs-heads. They grow to a considerable size, and Mr. A. Robinson mentions one that he measured, near six feet in circumference, the leaf better than four feet in length and one broad. Its mode of vegetation is this: as the nut lies upon moist ground, the kernel protrudes a root from one end, and gradually elevates it, while the plume rises

from its other end and displays the leaves. The tree is often seventy feet high. The flowers are frequently five segments, and the stamens are connected towards the base, the outer ones the largest, decreasing to the inner edge. The branches grow very upright and are few in number; the leaves are also few, agreeable to an old observation that the larger the leaves the fewer they are; and no tree has larger or fewer leaves than this."

Page 21.—After line three insert "The *Andromeda Jamaicensis* is a most elegant shrub, when in flower, it grows chiefly in barren gravelly soil, and sometimes rises to the height of sixteen or twenty feet."

Page 24.—After the article ANTIDOTE COCOON, insert "The late Mr. S. Felsted, who paid much attention to the virtues of plants, recommended the following mode of using these kernels for a pain in the stomach: Grate one or two kernels, after clearing them from the shell and skin which immediately covers them: Infuse this in about half a pint of boiling water, and, when nearly cool, strain off the decoction, adding a table spoonful of old rum or brandy. This quantity is to be taken warm at one or two draughts. The oil of the cocoon, extracted in the same way as from the common oil nut, by boiling the pounded kernel, hardens like beef fat when cold. This has been used with success in the gout, by embrocating the affected part; it is also good for other aches and pains."

Page 26 —After *ARDISIA TINIFOLIA*, add "The corolla is rotated, thrice the length of the perianth, hardly any tube, the limb divided almost down to the base into five equal, ovate, patent, reflected, segments. The flower is beautiful. The berry is one-celled moist and smooth: it has the calyx fixed to its base, and the style on its apex, containing a globose hard seed, in a reddish sweet pulp. It blooms early."

Page 32.—After the article ARROW-ROOT, insert "An eminent physician in St. Domingo cured the dropsy, in obstinate cases, by giving small doses of James's powders in arrow-root gruel, and making the patient drink daily a decoction of chaw-stick. The arrow-root, given in decoction or powder, except that it wants the purgative quality, is nearly as efficacious in fevers as James's powders, and, in pleurisies, as snake-root, and has been prescribed with success in fluxes.—A gentleman who had a number of rabbits, lost the greater part of them by a mortality with which they were attacked in a severe wet winter; after trying different experiments, without effect, he gave them daily, a parcel of the roots of the maranta, which they ate greedily, and the mortality ceased. Hogs are voraciously of this root."

Page 38.—After the article AVOCADO-PEAR, insert, "A fine oil is obtained by bruising Avocado Pears and boiling them, which has been found a good lamp oil. This tree is said to grow well in Old-Spain."

Page 51.—Line six from bottom, after *de paradisi*, insert, "The roots are said to dye a scarlet-colour. There is a variety of the Barbadoes Pride, the flowers of which are entirely yellow."

Page 57.—After the article *Cissus Sicyoides*, insert, "This is known by the name of *Wild Yam*, it has a biting pungent taste, like that of arum, but dwells not so long upon the tongue. The leaves bruised in water will make it lather like soap. A Robinson says he observed another species which he distinguishes thus, "*Irsiola scandens*"

dens foliis cordatis trifidis vel pentafidis rugosis baccis, nigris majoribus racemosis." This seems to be an annual plant, the leaves divided like those of the common vine, and the stems also furnished with tendrils. The berries are as big as a middling grape. It grew at Longville in Clarendon mountains, depressed and umbilicated. The seeds are four and like those of the grape."

After the article BASTARD BRYONY, in above page, insert, "The different species of *Cissus* are all said to be great cleansers of foul ulcers, and seem to consist of penetrating parts. The vivaceous qualities of the *Sicyoides* are surprising. When they wind themselves round trees, and when the stems have been cut from the branches as high as a man could reach, in order to destroy them, yet the branches thus cut off have protruded a number of slender red tender strings till they have reached the ground, though at seven or eight feet distance, and have taken root."

Page 58.—After the specific character of *BUMELIA MONTANA*, insert, "This is called Red Bully Tree, very common in the woods of Jamaica, which grows to a very large size and is an excellent timber-tree. It is very branchy towards the top, branches irregular. The leaves are of a shining green above and pale below, scattered, irregular, sometimes opposite, sometimes alternate. The flowers are clustered, axillary, sometimes lateral, standing on long one-flowered footstalks, eight or ten together, small, white, and of an agreeable scent. The leaves are about three inches long, and half as broad, elliptic, obtuse at the point, sharper towards the pedicel. The twigs of the branches scattered, alternate. This timber makes excellent scantling and boards, the latter of which, however, are apt to split in nailing, if not carefully bored; it lasts well either in or out of the weather. The bark has a bitter astringent taste, similar to the powder of Peruvian bark, for which it is thought a good substitute. It contains a milky substance when fresh."

Page 65.—After the article BASTARD IPECACUANHA, insert, "The following mode of preparing the juice of this plant is taken from the manuscript of Mr. Anthony Robinson, which, he says, may be given with great safety as a worm medicine, to children, beginning with a tea-spoonful: Take the leaves and bruise them in a mortar, then strain off the juice, and clarify it over the fire, adding a little salt to it. In dry weather it is much stronger than in moist, and ought therefore to be given in less quantity. This medicine ought however to be given with great caution, as there have been instances of its proving fatal. As a styptic the flowers have been used after being preserved in rum."

Page 74.—After the article BASTARD SENSITIVE, add the following species, which was introduced into this island, from the East-Indies by David Brown, M. D. of Port-Royal, a gentleman who has devoted a great deal of his leisure time to the pleasing study of botany. This plant has been pretty generally cultivated, and has thriven well in lowland situations, but does not succeed well in the mountains:

COCCINEA. SCARLET.

Stem arborescent, leaves pinnate; leaflets numerous, linear, obtuse, dusty; legumes compressed, equal.

This is a very beautiful tree, either with or without flowers, and of quick growth, rising from the seeds twenty feet high with a stem three inches and a half in diameter, in twelve months. The leaves are frequently more than a foot long, when they have from twenty-two to twenty-four pairs of beautiful long-oval leaflets, without an odd one, the longest about two inches long and nearly three-quarters of an inch broad,
dark

dark green above, and pale green below, of a soft texture. The leaves and branches are alternate and set at pretty equal distances, and, at the ends of the branches, there are generally eight or ten young leaves growing close to each other, and making a very handsome appearance. From the axils a single peduncle comes forth, divided into two, each of which bears a large and beautiful flower of a pale red colour, variegated with dark purple. The legume is flat and often eighteen inches long. It is a native of the East Indies.

Page 86.—After the article BETEL NUT, insert, "In Grose's Voyage to the East-Indies (Edition 1772, v. 1, p. 237) after describing the nut of the *Areca*, he adds, "but I would not advise any one to taste it green, since it affects the animal spirits so powerfully, that, instantaneously as it were, those who are not used to it fall down as in a trance. It is true they recover presently, and without any ill consequences."

Page 96.—After the article BITTERWOOD, insert, "Dr. Lettsom recommends bitterwood in hysterical atony, to which the female sex is prone, as it affords vigour and relief to the system, especially when united with the *vitiolum album* and still more with the acid of some absorbent. In dyspepsia, arising from hard drinking, and also in diarrhoeas, the quassia is recommended."

Page 158.—After the article CASHAW, insert, "The following is recommended as an effectual receipt for curing a horse that has eaten Cashaws: Take one pint of rum, one table spoonful and a half of salt, two wine-glassfuls of gum guaiacum and myrrh; all to be well mixed in a pint of water, and given to the animal as a drench, which should be repeated until relief is obtained. Exercise should be used after the drench."

Page 227.—Add the following exports of Coffee:

	lbs. coffee.
From 30th September, 1809, to 30th September, 1810.....	25,885,285
1810, 1811.....	17,460,068
1811, 1812.....	18,481,986

Page 260.—After the article DATE PLUM, insert, "The date plum is also known by the name of *Wattle-Tree*. It flowers in October and November. Some have both male and hermaphrodite flowers, and others contain them separate. The blossoms of all grow from the axils of the leaves. The fruit is spherical, four-celled, and is eaten by negroes."

Page 279.—After the article EBONY, MOUNTAIN, insert the following:

No English Name.

ECLIPTA.

CL. 19, OR. 2.—*Syngenesia polygamia superflua*. NAT. OR.—*Corymbifera*.

This generic name is derived from the Greek word for imperfect or deficient.

GEN. CHAR.—Common calyx many leaved; leaflets lanceolate, nearly equal, in a double series: compound corolla rayed, one of the rays most plentiful, female; of the disk hermaphrodite. Proper of the hermaphrodite tubular, four-cleft, upright, outwardly mealy; in the females very narrow, ligulate. Stamens, in the hermaphrodites, four very short filaments; anther cylindric. Pistil, in the hermaphrodites, has an oblong germ, a middling style, and a two-cleft, spreading stigma; the pericarp the unchanged calyx. Seed in the hermaphrodites oblong, compressed.

pressed, notched, obtuse, unarmed; in the females three-sided, oblong, notched, obtuse, unarmed; receptacle flattish chaffy; chaffs very narrow.

SESSILIS. SESSILE-LEAVED.

Stem erect, leaves slightly embracing, ovate, toothed; flowers axillary, sessile, discoid.

This is an annual plant, discovered in Jamaica by Swartz. This genus is distinct from *verbesina* in having four-cleft corollets, and unarmed seeds; and from *cotula* in having a chaffy receptacle.

Page 317.—Line six, after Hughes, p. 42, insert, "A dose of salts is previously recommended to be repeated in four days. The Guinea worm will then generally appear at the extremities, shewing its head at first like a pimple, which, as it shoots forth should be wound round a quill or something of the same size, and gently drawn, until pain is felt, taking great care not to break it; which is to be occasionally repeated until the whole is extracted. The body of this animal is generally about the size of an oznaburgh thread. A length of six or eight inches has been obtained sometimes at one winding: A negro who had one break out near the ankle, had also a sore higher up on his leg, and it was curious to observe, while the worm was drawing, how its body passed along the bottom of the sore."

The quantity of black-pepper is deemed rather small, double the quantity is better. A table-spoonful of the mixture has been given morning and evening with great success, which increases the appetite, and improves the appearance of the patient very much.

Page 318.—After line eighteen, insert, "On examining the flower of the *Cratogeomys*, the lacinia of the perianth were lanceolate, and at the base of each was placed a large nectareous gland, in length the breadth of the lacinia; in the inter-spaces are placed the petals, of a lanceolated form also, and bending all on one side; the stamens were all united at the base, forming a short tube encircling the germ, in number twelve to fourteen, all inclined on one side contrary to the petals. The base of the cup with the glands formed a deep hollow nectarium; the peduncles were slender, erect, an inch and a half long, having each a large gland and an acuminate small stipule at its base."

Page 388.—At the end of the page, insert, "The Jaack Tree when at full growth has the inner wood of a beautiful yellow colour, a few chips of it put in a bason of water gave it a fine yellow tinge, in which a piece of shirting, dipped all night, became of an orange colour; and perhaps the tree might make a valuable dyewood."

Page 469.—After the article *HIBISCUS ELATUS*, insert, "The variety with red flowers is called the Blue Mahoe, it is an excellent timber-tree, equal to the best hard timbers, for boards or scantling, which last longer than those of cedar, and they do not corrode the nails which fasten them, though cedar always does. The other kind with yellow flowers is not so good a timber wood, nor by any means so durable. It is difficult to distinguish the different woods, when newly cut; but it has been observed, that the wood of the blue kind, which is the best, appears purplish when cut with iron, which the other does not."

Page 536.—After the article *MUSK-WOOD*, insert, "The following new species of *Trichilia* is noticed in A. Robinson's manuscript; which he calls *BEAD-BUSH*:
Scandens,

Scandens, foliis simplicibus ovatis alternis, marginibus revolutis floribus spicatis tetragynous.

The calyx is a monophyllous perianth, coloured and permanent, deeply cut into five equal, ovate, concave, and patent sections; the corolla consists of five equal, ovate, concave erecto-patent petals; longer, broader, and more obtuse pointed, than the sections of the cup; the stamens are ten, subulated, erect, free above, and united at their base, forming a nectarium; they are somewhat longer than the petals and alternately shorter; the pistil has a pyramidal tetragonal germ, the styles short, four in number, erect, subulated, connivent; the stigmas are simple and obtuse, the fruit a quadrivalvular capsule, obtusely tetragonal, unilocular, containing four ovate seeds, gibbous on one side and flat on the other, black, shining, and decorated with parallel longitudinal striæ. The seeds are each involved but not entirely in a purple carnosous arilla. When the fruit is ripe it is of a reddish purple and shining; the cups are also red, and, when the valves expand themselves; the deep black shining tops of the seeds, with the lively purple of the arillas, exhibit no inelegant spectacle. There are very often but three valves, in which case the germ has but three styles. I have classed this plant with the *Trichilia*, with which, however, it disagrees in divers substantial points, but chiefly in the number of styles and monolocular capsules, yet in the germen dissected I observed four separate cells, and even in the ripe fruit may be observed the vestiges of a separating ridge or septum."

VOLUME SECOND.

X Page 141.—After the article SANTA MARIA insert the following: An anonymous correspondent, in the Jamaica magazine for April, 1813, states that "In the year 1809 there was an uncommon scarcity of white oak staves, in consequence of the American embargo, on which account I directed ten puncheons to be made of Santa Maria, Spanish Elm, and Gallimento. The Santa Maria being very difficult to split in the usual way, that alone was sawed to the proper size of staves; those staves, as well as the staves split from the Spanish Elm and Gallimento, were dressed and put into a large vessel, in which they were boiled for six or eight hours, and permitted to remain in the water afterwards until quite cold, for the purpose of detaching the gum and other tenacious matter which might adhere to them; after which, when dry, they were jointed and set up in trusses, for the purpose of hooping, &c. &c. When finished, they were without delay filled with rum, and headed up, after which they were for two or three days, rolled out of the store, to expose them to the sun for some hours, and were, at the same time, frequently turned over to discover whethert here was any leakage; the joints, however, being found perfectly tight, and being entirely convinced of the sufficiency of those casks, they were shipped for the London market, after being three or four weeks filled, at the end of which time there was neither a discolouration of the rum, nor did it appear to be impregnated with any taste or smell from the wood; and I have the gratification of learning from my correspondent, that each puncheon reached him as full as any other puncheon made of white oak, nor was the rum in the least injured, but brought as good a price as any."

CLASSICAL

CLASSICAL INDEX.

IN WHICH THE PLANTS NOTICED IN THIS WORK ARE SCIENTIFICALLY ARRANGED, AGREE-
ABLE TO THE CLASSES AND ORDERS OF THE LINNEAN SYSTEM

Note—E after the specific name stands for exotic; all other plants are indigenous.
The figures with a star preceding refer to Vol. II.

CLASS 1.—ORDER 1.

MONANDRIA MONOGYNIA.

1. With an inferior fruit, one or three-celled.

Genus.	Species.	English name.	
CURCUMA	<i>longa</i> E	Turmeric	*246
ALPINIA	<i>racemosa</i>	Wild ginger	*280
	<i>occidentalis</i>	Ditto	*281
	<i>arabicus</i>	Ditto	ib
COSTUS	<i>zinziber</i>	Ginger	322
AMOMUM	<i>sylvestre</i>	Great wild ginger	325
MARANTA	<i>arundinacea</i>	Arrow-root	30
CANNA	<i>indica</i>	Indian-shot	417
	2. One-seeded.		
BOERHAAVIA	<i>diffusa</i>	Hogweed	376
	<i>hirsuta</i>		377
	<i>scandens</i>		ib
SALICORNIA	<i>herbacea</i>	Salt-wort	*136
ZOSTERA	<i>marina</i>	Turtle-grass	*250
	ORDER 2.—DIGYNIA.		
LACISTEMA	<i>myricoides</i>	None	437
VOL. II.	80		CLASS

HORTUS JAMAICENSIS.
CLASS II.—ORDER I.
DIANDRIA MONOGYNIA.

<i>Genus.</i>	<i>Species.</i>	<i>English name.</i>	
1. Flowers inferior, one-petaled, regular.			
CHIONANTHUS	<i>incrassata</i>	Snow-drop tree.	*176
2. Flowers inferior, monopetalous, irregular. Fruit capsular			
JAMINUM	<i>officinale</i>	Jasmine	396
	<i>sambac</i>	Arabian jasmine	ib.
GRATIOIA	<i>monniera</i>	Water hyssop	*269
	<i>repens</i>		*270
JUSTICIA	<i>assurgens</i>	Justicia balsam	431
	<i>pectoralis</i>	Garden balsam	432
	<i>armata</i>		ib.
	<i>acicularis</i>		ib.
	<i>humifusa</i>		ib.
	<i>nemorosa</i>		ib.
UTRICULARIA	<i>obtusa</i>	Bladder wort	*264
3. Flowers inferior, monopetalous, irregular. Seeds naked.			
VERBENA	<i>jamaicensis</i>	Vervain	*257
	<i>prismatica</i>		*259
	<i>lappulacea</i>	Styptic or velvet bur	ib.
	<i>stæchadifolia</i>		ib.
	<i>nodiflora</i>		260
	<i>urticifolia</i>		ib.
	<i>globiflora</i>	Wild spikenard	ib.
ROSMARINUS	<i>officinalis</i> E	Rosemary	*127
SALVIA	<i>officinalis</i> E	Sage	*135
	<i>occidentalis</i>		ib.
	<i>tenella</i>		*136
DIANTHERA	<i>americana</i>	Balsam herb	41
	<i>comata</i>		ib.
ORDER 3.—TRIGYNIA.			
PIPER	<i>umbellatum</i>	Colt's foot	229
	<i>peltatum</i>	Ditto	ib.
	<i>amalago</i>	Pepper elder	*50
	<i>aduncum</i>	Spanish elder	*51
	<i>rotund folium</i>		*52
	<i>distachyon</i>		ib.
	<i>verticillatum</i>		*53
	<i>macrophyllum</i>		ib.
	<i>verrucosum</i>		ib.
	<i>quadrifolium</i>		*54
	<i>discolor</i>		ib.
		PIPER	

Genus.	Species.	English name.	
PIPER	geniculatum		54
—	hispidum		ib.
—	nitidum		*55
—	alpinium		ib.
—	hispidulum		ib.
—	tenellum		ib.
—	amplexicaule		*56
—	glabellum		ib.
—	serpens		ib.
—	cordifolium		*57
—	mumularifolium		ib.
—	filiforme		ib.
—	stellatum		ib.
—	reticulatum		ib.
—	pulchellum		*58
—	scabrum		ib.

CLASS III.—ORDER I.

TRIANDRIA MONOGYNIA.

1. Flowers superior.

MELOTHRIA	pendula	Wild cucumber	*280
MORÆA	plicata	None	511

2. Flowers inferior, not glumaceous. Fruit vascular.

COMMELINA	communis	Commeline	230
—	nudiflora		ib.
HIPPOCRATEA	volubilis	None	373
COMOCLADIA	integrifolia	Maiden plum	475
—	dentata		476

3. Flowers inferior, glumaceous, like those of grass. Seed, one.

SCHOENUS	stellatus	Bog rush	103
—	restioides		ib.
—	cladium		104
—	glomeratus		ib.
—	effusus		ib.
—	cyperoides		ib.
—	gracilis		105
—	setaceis		ib.
—	pusillis		ib.
—	surinamensis		ib.
CYPERUS	articulatus	Adrue	7
—	minimus	Sedge	*161
—	monostachyos		ib.
—	filiformis		*162

Genus	Species	English name	
CYPERUS	<i>confertus</i>		*162
	<i>viscosus</i>		ib.
	<i>elegans</i>		ib.
	<i>odoratus</i>		ib.
	<i>compressus</i>		*163
	<i>strigosus</i>		ib.
	<i>tenuis</i>		ib.
SCIRPUS	<i>mutatus</i>	Rush	*132
	<i>geniculatus</i>	Bullrush	*133
	<i>capitatus</i>	Rush	ib.
	<i>lacustris</i>		ib.
	<i>autumnalis</i>		*134
	<i>ferrugineous</i>		ib.
	<i>spadiceus</i>		ib.
KYLLINGIA	<i>monocephala</i>	None	435
	<i>triceps</i>		ib.
	<i>filiformis</i>		ib.
CENCHRUS	<i>echinatus</i>	Burgrass	126
	<i>tribuloides</i>		ib.
	<i>granularis</i>		127
	<i>setosus</i>		ib.
FUIRENA	<i>paniculata</i>	Lofty grass	464

ORDER 2.—DIGYNIA.

1. *Calyxes one-flowered, wandering.*

PANICUM	<i>setosum</i>	Panic grass	*29
	<i>colonum</i>		*30
	<i>trizoides</i>		ib.
	<i>pilosum</i>		ib.
	<i>fasciculatum</i>		*31
	<i>lineare</i>		ib.
	<i>nemorosum</i>		ib.
	<i>acuminatum</i>		ib.
	<i>rigens</i>		*32
	<i>fuscum</i>		ib.
	<i>laxum</i>		ib.
	<i>flavescens</i>		*33
	<i>diffusum</i>		ib.
	<i>oryzoides</i>		ib.
	<i>pallens</i>		*34
	<i>lanatum</i>		ib.
	<i>arundinaceum</i>		ib.
	<i>glutinosum</i>		*35
	<i>trichoides</i>		ib.
	<i>divaricatum</i>		*36
	<i>molle</i>	Scotch grass	*151
ARISTIDA	<i>adscendens</i>	Bearded grass	81

ARISTIDA

Genus	Species	English name.	
ARISTIDA	<i>americana</i>		81
PASPALUM	<i>bicorne</i>	Running grass	*129
	<i>distichum</i>		*130
	<i>virgatum</i>		ib.
	<i>paniculatum</i>		ib.
	<i>vaginatum</i>		*131
	<i>decumbens</i>		ib.
	<i>filiforme</i>		ib.
MILIUM	<i>punctatum</i>	Millet grass	505
	<i>compressum</i>		ib.
	<i>digitatum</i>		ib.
	<i>panicum</i>		ib.
AGROSTIS	<i>purpurascens</i>	Bent grass	82
	<i>virginica</i>		83
SACCHARUM	<i>officinarum</i>	Sugar cane	*204
LEERSIA	<i>monandra</i>	None	441
	<i>hexandra</i>		ib.

2. Calyxes two-flowered, wandering.

MELICA	<i>papilionacea</i>	Melic grass	500
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3. Calyxes many-flowered, wandering.

UNIOLA	<i>spicata</i>	None	*263
POA	<i>glutinosa</i>	Meadow grass	499
	<i>prolifera</i>		ib.
	<i>ciliaris</i>		500
ARUNDO	<i>bambos</i>	Bamboo	42
	<i>tabacaria</i> . var.	Wild cane	*279

4. Spiked, with the common receptacle or rachis hollowed out.

CYNOSURUS	<i>virgatus</i>	Dog's tail grass	267
	<i>indicus</i>		ib.

ORDER 3.—TRIGYNIA.

Flowers inferior.

HOLOSTEUM	<i>cordatum</i>	Chickweed	178
	<i>diandrum</i>		ib.
MOLLUGO	<i>verticillata</i>	African chickweed	179
	<i>bellidifolio</i>		ib.

CLASS IV.—ORDER I.

TETRANDRIA MONOGYNIA.

1. Flowers monopetalous, one-fruited, inferior.

CALLICARPA	<i>ferruginea</i>	None	144
	<i>reticulata</i>		ib.
WALLENIA	<i>laurifolia</i>	None	*266

AEGIPHILA

Genus	Species	English name,	
AEGIPHILA	<i>elata</i>	Goat friend	326
_____	<i>fatida</i>		<i>ib.</i>
_____	<i>trifida</i>		<i>ib.</i>
SCOPARIA	<i>dulcis</i>	Liquorice weed	455
PLANTAGO	<i>major</i>	English plantain	*70
BUDDLEIA	<i>americana</i>	None	122
2. Flowers monopetalous, one-fruited, superior.			
IXORA	<i>americana</i>	Wild jasmin	*283
_____	<i>fasciculata</i>		<i>ib.</i>
_____	<i>multiflora</i>		<i>ib.</i>
CATESBÆA	<i>parviflora</i>	Lily thorn	450
HOFFMANNIA	<i>pedunculata</i>	None	374
ERNODEA	<i>littoralis</i>	Branched spurge	*200
COCOSYPSILUM	<i>repens</i>	None	205
HEDYOTIS	<i>rupestris</i>	Earwort	276
OLDENLANDIA	<i>uniflora</i>	None	*17
_____	<i>corymbosa</i>		*18
_____	<i>umbellata</i> E.	Che or Indian madder	<i>ib.</i>
MANNETTIA	<i>lygistum</i>	None	485
3. Flowers monopetalous, dicccous, inferior.			
SPERMACOCCE	<i>tenuior</i>	Button weed	127
_____	<i>verticillatus</i>		128
_____	<i>hirta</i>		<i>ib.</i>
_____	<i>villosa</i>		129
_____	<i>spinosa</i>		<i>ib.</i>
DIODIA	<i>simplex</i>	None	265
_____	<i>prostrata</i>		<i>ib.</i>
_____	<i>sarmentosa</i>		<i>ib.</i>
4. Flowers four-petaled, inferior.			
SAMARA	<i>coriacea</i>	None	*137
FAGARA	<i>pterota</i>	Savin tree	*146
_____	<i>emarginata</i>		*147
_____	<i>spinosa</i>		<i>ib.</i>
_____	<i>acuminata</i>		<i>ib.</i>
AMMANNIA	<i>latifolia</i>	None	19
_____	<i>sanguinolenta</i>		<i>ib.</i>
5. Flowers four-petaled, superior.			
CISSUS	<i>sicyoides</i>	Bastard bryony	56
_____	<i>trifoliata</i>		57
_____	<i>quadrangularis</i>		<i>ib.</i>
_____	<i>acida</i>	Vine sorrel	*262
LUDWIGIA	<i>repens</i>	None	466
6. Flowers incomplete, inferior.			
POTHOS	<i>violacea</i>	None	*93
			RIVINA

Genus	Species	English name	
RIVINA	<i>octandra</i>	Hoopwithe	380
	<i>humilis</i>	Ditto	381
DORSTENIA	<i>cordifolia</i>	None	270

ORDER 2.—DIGYNIA.

CUSCUTA	<i>americana</i>	Dodder	265
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ORDER 4.—TETRAGYNIA.

MYGINDA	<i>rhacoma</i>	None	536
	<i>latifolia</i>		537
POTAMOGETON	<i>lucens</i>	Pondweed	*90

CLASS V.—ORDER I.

PENTANDRIA MONOGYNIA.

1. Flowers monopetalous, inferior, one-seeded.

MIRABILIS	<i>jalappa</i>	Marvel of Peru	497
PLUMBAGO	<i>scandens</i>	Tooth or lead wort	*234

2. Flowers monopetalous, inferior, four-seeded, *Asperifoliae*.

HELIOTROPIMUM	<i>indicum</i>	Turnsole	*248
	<i>fruticosum</i>		*249
	<i>currassavicum</i>		ib.
	<i>gnaphalodes</i>		ib.
	<i>parviflorum</i>		*250
BORRAGO	<i>officinalis</i> E.	Bororage	107

3. Flowers monopetalous, inferior, seeds inclosed in a vessel.

ANAGALLIS	<i>pumila</i>	Dwarf pimpernel	276
MENYANTHES	<i>indica</i>	Marsh trefoil	496
SPIGELIA	<i>anthelmia</i>	Worm grass	*305
OPHIORRHIZA	<i>mitreola</i>	Serpent's root	*170
CONVOLVULUS	<i>carolinus</i>	Bindweed	88
	<i>verticillatus</i>		ib.
	<i>umbellatus</i>		89
	<i>quinquefolius</i>		ib.
	<i>repens</i>		ib.
	<i>hederaceous</i>		90
	<i>tomentosus</i>		ib.
	<i>polyanthus</i>	Christmas gambol	189
	<i>battatas</i>	Sweet potatoes	*219
	<i>brasiliensis</i>	Purging sea bindweed	*107
LISIANTHUS	<i>longifolius</i>	None	457
	<i>cordifolius</i>		458
	<i>exsertus</i>		ib.
	<i>latifolius</i>		ib.
	<i>umbellatus</i>		ib.

DATURA

Genus	Species	English name	
DATURA	<i>stramonium</i>	Thorn apple	*237
NICOTIANA	<i>tabacum</i>	Tobacco	*231
IPOMOEA	<i>quamoclit</i>	Indian creeper	399
	<i>coccinea</i>		ib.
	<i>tuberosa</i>	Seven ear vine	400
	<i>bona nox</i>		ib.
	<i>violacea</i>		401
	<i>triloba</i>		ib.
	<i>pes tigridis</i>		ib.
	<i>parviflora</i>		402
NERIUM	<i>oleander E.</i>	South sea rose	*181
ECHITES	<i>sub-erecta</i>	Savanna flower	*144
	<i>biflora</i>		*145
	<i>torulosa</i>		ib.
	<i>umbellata</i>		ib.
	<i>asperuginis</i>		*146
	<i>floribunda</i>		ib.
PLUMIERIA	<i>alba</i>	Jasmine tree	397
	<i>rubra</i>	Ditto	398
CAMERARIA	<i>latifolia</i>	Bastard manchioneal	66
	<i>angustifolia</i>		67
TABERNÆMONTANA	<i>laurifolia</i>	None	*222
	<i>discolor</i>		ib.
	<i>citrifolia</i>		ib.
VINCA	<i>rosea</i>	Periwinkle	*60
CERBERA	<i>thevetia</i>	None	174
ARDISIA	<i>tinifolia</i>	None	26
	<i>coridcea</i>		ib.
BUMELIA	<i>nigra</i>	Bastard bully tree	58
	<i>retusa</i>		ib.
	<i>pallida</i>		ib.
	<i>montana</i>		ib.
	<i>rotundifolia</i>		ib.
	<i>salicifolia</i>		ib.
LAUGERIA	<i>lucida</i>	None	439
	<i>tomentosa</i>		ib.
VARRONICA	<i>lineata</i>	Wild sage	*296
	<i>currassavica</i>	Jack in the bush	ib.
	<i>bullata</i>		ib.
CORDIA	<i>collococca</i>	Clammy cherry	197
	<i>macrophylla</i>	Broad leaved cherry	198
	<i>sebestena</i>	Scarlet cordia	ib.
	<i>micranthus</i>		ib.
	<i>elliptica</i>		199
	<i>gerascanthus</i>	Spanish elm	*182
EHRETIA	<i>tinifolia</i>	Bastard cherry	60
	<i>courreria</i>	Currant tree	265
		JACQUINIA	

HORTUS JAMAICENSIS.

329

Genus	Species	English name	
JACQUINIA	<i>armillaris</i>	None	390*
RAUWOLFIA	<i>canescens</i>	None	*112
CESTRUM	<i>vespertinum</i>	Poison berries	*78
	<i>hirtum</i>		ib.
TOURNEFORTIA	<i>humilis</i>	Basketwithe	54
	<i>hirsutissima</i>		ib.
	<i>volubilis</i>		ib.
	<i>cymosa</i>		55
	<i>suffruticosa</i>		ib.
	<i>bicolor</i>		ib.
CAPSICUM	<i>baccatum</i>	Guinea pepper	355
PHYSALIS	<i>angulata</i>	Winter cherries	*302
ATROPA	<i>arborescens</i>	Tree atropa	*237
SOLANDRA	<i>grandiflora</i>	Peach coloured trumpet	
		flower	*178 and *242
CHRYSOPHYLLUM	<i>monopyrenum</i>	Damson plum	259
	<i>rugosum</i>		ib.
	<i>cainito</i>	Star apple	*202
SOLANUM	<i>nigrum</i>	Branched calala	141
	<i>bahamense</i>	Canker-berry	152
	<i>melongena</i>	Egg plant	279
	<i>dulcumara</i>	Nightshade	*9
	<i>verbacifolium</i>	Ditto	ib.
	<i>diphyllum</i>	Ditto	ib.
	<i>jamaicense</i>	Ditto	ib.
	<i>havanense</i>	Ditto	*10
	<i>triste</i>	Ditto	ib.
	<i>tuberosum</i>	Potatoe	*82
	<i>lycopersicon</i>	Tomato berries	*234
	<i>mammosum</i>	Turkey berries	*245
4. Flowers monopetalous, superior.			
MACROCNEUM	<i>jamaicense</i>	White-thorn	*277
RONDELETIA	<i>trifoliata</i>	None	*121
	<i>pilosa</i>		ib.
	<i>thyrsoidæ</i>		ib.
	<i>racemosa</i>		*122
	<i>laurifolia</i>		ib.
	<i>tomentosa</i>		*123
	<i>umbellata</i>		ib.
	<i>incana</i>		*124
	<i>hirsuta</i>		ib.
	<i>hirta</i>		*125
CINCHONA	<i>brachycarpa</i>	Jamaica bark	391
	<i>carribea</i>	Ditto	ib.

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CINCHONA

Genus	Species	English name	
CINCHONA	<i>triflora</i>	Jamiaca bark	393
PORTLANDIA	<i>grandiflora</i>	None	*91
	<i>coccinea</i>		*92
LOBELIA	<i>longiflora</i>	Cardinal flower	153
	<i>assurgens</i>		ib.
	<i>acuminata</i>		ib.
	<i>siphilitica</i>		ib.
SCÆVOLA	<i>lobelia</i>	None	*148
MORINDA	<i>royoc</i>	Indian Mulberry	416
PSYCHOTRIA	<i>herbacea</i>	None	*100
	<i>myrsiphyllum</i>		*101
	<i>pedunculata</i>		ib.
	<i>pubescens</i>		ib.
	<i>marginata</i>		*102
	<i>asiatica</i>		ib.
	<i>crocea</i>		ib.
	<i>pavetta</i>		ib.
	<i>uliginosa</i>		*103
	<i>corymbosa</i>		ib.
	<i>hirsuta</i>		ib.
	<i>alpina</i>		ib.
	<i>foetens</i>		104
	<i>nervoso</i>		ib.
	<i>glabrata</i>		ib.
	<i>involucrata</i>		ib.
	<i>patens</i>		ib.
	<i>citrifolia</i>		ib.
	<i>brachiata</i>		*105
	<i>laxa</i>		ib.
	<i>laurifolia</i>		ib.
	<i>grandis</i>		ib.
COFFEA	<i>arabica</i> E.	Coffee	213
	<i>occidentalis</i>		228
CHIOCCOCA	<i>racemosa</i>	Snowberry	*175
GARDENIA	<i>aculeata</i>	Indigo berry	427
	<i>mitis</i>		ib.
	<i>florida</i> E.	Cape jasmine	ib.
SCHWENKFELDIA	<i>hirta</i>	None	*150
HAMELLIA	<i>ventricosa</i>	None	364
	<i>chrysantha</i>		ib.
	<i>axillaris</i>		365
ERITHALIS	<i>fruticosa</i>	None	282

G. Flowers

Genus	Species	English name	
5. Flowers tetrapetalous.			
HIRTELLA	<i>americana</i>	None	374
RHAMNUS	<i>colubrinus</i>	Buckthorn	119
	<i>sarcomphalus</i>		120
	<i>sphaerospermus</i>		ib.
	<i>ellipticus</i>		ib.
VITIS	<i>vinifera</i> E.	Grape vine	334
	<i>indica</i>	Jamaica grape	393
MANGIFERA	<i>indica</i>	Mango tree	485
CEDRELA	<i>odorata</i>	Cedar tree	169
IMPATIENS	<i>balsamina</i> E.	Garden balsam	315
ITEA	<i>cyrilla</i>	None	430
SAUVAGESIA	<i>erecta</i>	Iron shrub	ib.

6. Flowers pentapetalous, superior.

HEDERA	<i>pendula</i>	Ivy	433
	<i>nutans</i>		434
CONOCARPUS	<i>erecta</i>	Alder or Button tree	10
	<i>racemosa</i>		ib.
ACHYRANTHES	<i>aspera</i>	None	4
	<i>altissima</i>		ib.
PARKINSONIA	<i>aculeata</i>	Jerusalem thorn	398
CELOSIA	<i>paniculata</i>	Cock's-comb	206
	<i>cristata</i>	Ditto	ib.
ILLECEBRUM	<i>polygonoides</i>	Rupture wort	*131
	<i>vermiculatum</i>		*132

7. Flowers incomplete, superior.

HELICONIA	<i>bihai</i>	Bastard plantain	69
	<i>psittacorum</i>		71

ORDER 2.—DIGYNIA.

1. Flowers monopetalous, inferior.

CYNANCHIUM	<i>crispiflorum</i>	None	257
ASCLEPIAS	<i>currassavica</i>	Bastard ipecacuanha	63
	<i>gigantea</i>	Swallow wort	*217
	<i>tomentosa</i>		*218
	<i>viminalis</i>		ib.
NAMA	<i>jamaicensis</i>	None	*1
ROCHFORTIA	<i>cuneata</i>	None	*119
	<i>ovata</i>		ib.
DICHONDRA	<i>repens</i>	None	264

T t 2

2. Flowers

Genus.	Species.	English name.	
2. Flowers incomplete.			
BETA	vulgaris F.	Beet	81
GOMPHRENA	globosa	Bachelor's button	40
	interrupta		ib.
BOSEA	yervamiro	Golden rod tree	328

4. Flowers pentapetalous, superior, two seeded; umbellate, with both general and partial involucre.

ERYNGIUM	foetidum	Eryngo or fit-weed	283
HYDROCOTYLE	umbellata	Water penny worth	*49
	asiatica	Mountain ditto	*50
DAUCUS	carota E.	Carrot	153

Without any involucre and scarcely any general involucre, and never any partial involucre.

ANETHUM	feniculum E.	Fennel	287
	graveolens E.	Dill	ib.
APIUM	petroselinum E.	Parsley	*39
	graveolens E.	Celery	ib.

ORDER 3.—TRIGYNIA.

1. Flowers superior.

VIBURNUM	villosum	None	*261
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2. Flowers inferior.

RHUS	oncopium.	Hog-gum tree	374
SPATHELIA	simplex	Mountain pride	524
STAPHELIA	occidentalis	None	*201
TURNERA	ulmitolia	Holly rose	378
	pumila		379
	cistoides		ib.
XYLOPHILA	latifolia	Sea-side laurel	*154
	angustifolia		*155
	arbuscula		ib.
	montana		ib.

ORDER 4.—TETRAGYNIA.

EVOLVULUS	mummularius	Bindweeds	91
	linifolius		ib.
	sericeous		ib.
	gangeticus		92

ORDER 5.—PENTAGYNIA.

ARALIA	arborea	Galapee tree	313
	capitata		314
	sciodaphyllum		ib.
XANTHOKYLUM	clava hercultis	Prickly yellow wood	*95

CLASS

CLASS VI.—ORDER I.

HEXANDRIA MONOGYNIA.

1. Flowers calyced, furnished both with calyx and corolla, but without spathes.

Genus	Species	English name	
BROMELIA	<i>penguin</i>	Penguin	*48
_____	<i>bracteata</i>		*49
_____	<i>ananas</i>	Pine	*69
_____	<i>karatas</i>	Silk grass	*173
PITCAIRNIA	<i>bromilæfolia</i>	Scarlet pitcairnia	*149
TILLANDSIA	<i>usneoides</i>	Old man's beard	*19
_____	<i>recurvata</i>	Ditto	ib.
_____	<i>utriculata</i>	Wild pine	*286
_____	<i>serrata</i>		ib.
_____	<i>lingulata</i>		ib.
_____	<i>tenuifolia</i>		*287
_____	<i>monastachya</i>		ib.
_____	<i>fasciculata</i>		ib.
_____	<i>nutans</i>		*288
_____	<i>canescens</i>		ib.
_____	<i>angustifolia</i>		ib.
_____	<i>pruinosa</i>		ib.
_____	<i>paniculata</i>		*289
_____	<i>flexuosa</i>		ib.
_____	<i>setacea</i>		ib.
TRADECANTIA	<i>zanonia</i>	Spider wort	*187
_____	<i>multiflora</i>		*188
_____	<i>cordifolia</i>		ib.
_____	<i>discolor</i>		ib.
LORANTHUS	<i>americanus</i>	Mistletoe	508
_____	<i>occidentalis</i>		509
_____	<i>parviflorus</i>		510
_____	<i>pauciflorus</i>		ib.
HILLIA	<i>longiflora</i>	None	372
_____	<i>tetrandra</i>		373
PRINOS	<i>montana</i>	Winter berry	*302
ACHRAS	<i>montana</i>	Bully tree	124
_____	<i>mammosa</i>	Mammee sapota	480
_____	<i>sapota</i>	Naseberry	*2

2. Flowers spathaceous, or glumaceous.

PANCRATIUM	<i>carribæum</i>	Lily	449
AMARYLLIS	<i>belladonna</i>	Lily	450
PONTERIA	<i>azurea</i>	Water plantain	*273
_____	<i>limosa</i>		*274
ALLIUM			

Genus.	Species.	English name.	
ALLIUM	<i>escalonicum</i> E.	Eschalot	284
—	<i>porrum</i> E.	Leek	285
—	<i>schænoprassum</i> E.	Chive	ib.
—	<i>sativum</i> E.	Garlic	315
—	<i>cepa</i> E.	Onion	*22
HYPOXIS	<i>decumbens</i>	Star of Bethlehem	*202

3. Flowers naked.

AGAVE	<i>americana</i>	Coratoc	234
ALOE	<i>perfoliata</i>	Aloes	12
ASPHODEL	<i>asphodelus</i> E.	King's-spear	35
ASPARAGUS	<i>officinalis</i> E.	Asparagus	ib.
YUCCA	<i>glorioso</i> E.	Dagger plant	258
—	<i>aloefolia</i> E.	—	ib.
—	<i>draconis</i> E.	—	ib.
—	<i>filamentosa</i> E.	—	ib.
PEPLIS	<i>tetrandra</i>	Water purslane	*275
THRINAX	<i>parviflora</i>	Palmeto royal	*27

ORDER 2.—DIGYNIA.

ORYZA	<i>sativa</i> E.	Rice	*117
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ORDER 4.—TETRAGYNIA.

PETIVERIA	<i>alliacea</i>	Guinea-hen weed	354
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ORDER 5.—POLYGYNIA.

ALISMA	<i>cordifolia</i>	Great-Water plantain	*274
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CLASS VIII.—ORDER I.

OCTANDRIA MONOGYNIA.

1. Flowers complete.

CUPANIA	<i>glabra</i>	Loblolly wood	460
TROPEOLUM	<i>majus</i>	Indian cress	402
—	<i>minus</i>	—	403
COMBRETUM	<i>laxum</i>	Red withe	*114
RHEXIA	<i>acisanthera</i>	None	5
—	<i>leucantha</i>	—	6
—	<i>purpurea</i>	—	ib.
GUAREA	<i>trichiloides</i>	Muskwood	534
AMYRIS	<i>balsamifera</i>	Candlewood	146
—	<i>maritima</i>	—	148
—	<i>sylvatica</i>	—	149
ALLOPHYLLUS	<i>comminea</i>	None	230
XIMENIA	<i>americana</i>	Sea-side plum	*156
—	<i>inermis</i>	—	ib.
MULLIA		MELICocca	

HORTUS JAMAICENSIS.

335

Genus	Species	English name.	
MELICOCCA	<i>bijuga</i>	Genip-tree	318
FUCHSIA	<i>involucrata</i>	None	310
	<i>coccinea</i>		ib.
VACCINIUM	<i>meridionale</i>	Jamaica bilberry	393
	2. Flowers incomplete.		
DAPHNE	<i>lagetto</i>	Lace bark tree	436
	<i>occidentalis</i>		437
	<i>tinifolia</i>		ib.
DODONEA	<i>viscosa</i>	Switch sorrel	*220
	<i>angustifolia</i>		*221
BLIGHIA	<i>sapida</i>	Akee	9

ORDER 2.—DIGYNIA.

WEINMANNIA	<i>glabra</i>	None	*275
	<i>hirta</i>		*276

ORDER 3.—TRIGYNIA.

PAULLINIA	<i>curassavica</i>	Supple jack	*215
	<i>pinnata</i>		*216
	<i>divariata</i>		ib.
	<i>mexicana</i>		ib.
CARDIOSPERMUM	<i>halicacabum</i>	Heart peas	368
	<i>grandiflorum</i>		ib.
SAPINDUS	<i>saponaria</i>	Soapberry	*177
	<i>spinosus</i>	Licca tree	443
COCCOLOBO	<i>uvifera</i>	Bay grape	76
	<i>pubescens</i>	Grape tree	77
	<i>punctato</i>	Checquered ditto	ib.
	<i>excoriata</i>	Mountain grape	78
	<i>tenuifolia</i>		ib.
	<i>nivea</i>		ib.
POLYGONUM	<i>persicaria</i>	Arsmart	32
	<i>barbatum</i>		33
	<i>scandens</i>	Buck wheat	121

CLASS IX.—ORDER 1.

ENNEANDRIA MONOGYNIA

LAURUS	<i>persea</i>	Avocado pear tree	37
	<i>montana</i>	Bay tree	78
	<i>exaltata</i>	Ditto	ib.
	<i>triandra</i>	Ditto	79
	<i>coriacea</i>	Ditto	ib.
	<i>membranacea</i>	Ditto	ib.
	<i>patens</i>	Ditto	ib.

LAURUS

Genus	Species	English name	
LAURUS	<i>pendula</i>	Ditto	70.
	<i>floribunda</i>	Ditto	ib.
	<i>benzoin</i> E.	Benjamin tree	82
	<i>camphora</i> E.	Camphire tree	144
	<i>cinnamomum</i> E.	Cinnamon	191
	<i>chloroxylon</i>	Cogwood	228
	<i>borbonia</i>	Sweetwood	*220
	<i>leucoxylon</i>	Loblolly sweetwood	ib.

CLASS X.—ORDER 1.

DECANDRIA MONOGYNIA.

1. Flowers polypetalous, irregular.

SOPHORA	<i>monosperma</i>	Red bead tree	*113
	<i>occidentalis</i>		ib.
BAUHINIA	<i>porrecta</i>	Mountain Ebony	278
HYMENEAE	<i>courbaril</i>	Locust tree	461
PARKINSONIA	<i>aculeata</i>	Jerusalem thorn	398
CÆSALPINIA	<i>pulcherrima</i>	Barbadoes pride	51
	<i>braziliensis</i>	Braziletto	110
	<i>bijuga</i>	Indian savin tree	111
CASSIA	<i>chamaecrista</i>	Cane-piece sensitive	151
	<i>fistula</i>	Cassia stick tree	164
	<i>javanica</i>	Horse cassia	383
	<i>alata</i>	Ring worm shrub	*118
	<i>viminea</i>	Senna	*164
	<i>emarginata</i>		ib.
	<i>obtusifolia</i>	Senna	*164
	<i>pilosa</i>		*165
	<i>biflora</i>		ib.
	<i>serpens</i>		*166
	<i>glandulosa</i>		ib.
	<i>flexuosa</i>		ib.
	<i>virgata</i>		ib.
	<i>sericea</i>		ib.
	<i>lineata</i>		*167
	<i>senna</i>		ib.
	<i>occidentalis</i>	Stinking weed	*203
GUILANDINA	<i>bonduc</i>	Nickars	*7
	<i>bonducella</i>	Nickars	*7
	<i>moringa</i>	Horse raddish tree	385

2. Flowers polypetalous, equal.

ADENANTHERA	<i>pavonina</i> E.		7
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HEMATOXYLON

Genus	Species	English name.	
HÆMATOXYLON	<i>campechianum</i> E	Logwood	464
TRICHILIA	<i>moschata</i>	Muskwood	535
	<i>spondioides</i>		536
MELIA	<i>azederach</i> E	Bead or Hoop tree	80
SWIETENIA	<i>mahogani</i>	Mahogany	470
GUAIACUM	<i>officinale</i>	Lignum Vitæ	444
RUTA	<i>graveolens</i> E	Rue	*128
TRIBULUS	<i>maximus</i>	Caltrops	144
	<i>cistoides</i>	Turkey blossom	*246
QUASSIA	<i>polygama</i>	Bitter wood	94
	<i>simaruba</i>	Mountain damson	521
	<i>excelsa</i>		522
PETALOMA	<i>myrtilloides</i>	Silver wood tree	*174
CLETHRA	<i>tinifolia</i>	Bastard locus	65
MELASTOMA	<i>holosericea</i>		403
	<i>scandens</i>		404
	<i>acinodendrum</i>	Indian currant	ib.
	<i>sessilifolia</i>		ib.
	<i>quadrangularis</i>		ib.
	<i>ornata</i>		ib.
	<i>trinervia</i>		ib.
	<i>ramiflora</i>		ib.
	<i>prasina</i>		405
	<i>procera</i>		ib.
	<i>rigida</i>		ib.
	<i>montana</i>		ib.
	<i>patens</i>		ib.
	<i>lævigata</i>		ib.
	<i>tamonea</i>		ib.
	<i>albicans</i>		406
	<i>argentea</i>		ib.
	<i>hirta</i>		ib.
	<i>elata</i>		ib.
	<i>fragiles</i>		ib.
	<i>scabrosa</i>		407
	<i>rubens</i>		ib.
	<i>fascicularis</i>		ib.
	<i>purpurascens</i>		ib.
	<i>hirtella</i>		ib.
	<i>hirsuta</i>		ib.
	<i>glabrata</i>		ib.
	<i>micrantha</i>		408
	<i>virgata</i>		ib.
	<i>tetrandra</i>		ib.
	<i>pilosa</i>		ib.
	<i>discolor</i>		ib.

HORTUS JAMAICENSIS

Genus.	Species.	English name.	
JUSIEUA	<i>repens</i>	Primrose willow	*98
_____	<i>octovalvis</i>		*99
_____	<i>pubescens</i>		ib.
_____	<i>erecta</i>		ib.
_____	<i>hirta</i>		*100
	3. Flowers monopetalous equal		
ANDROMEDA	<i>jamaicensis</i>	None	20
_____	<i>fasciculata</i>		21
_____	<i>octandra</i>		ib.
	4. Flowers apetalous or incomplete.		
SAMYDA	<i>nitida</i>	Cloven berry	201
_____	<i>parviflora</i>		ib.
_____	<i>pubescens</i>		202
_____	<i>villosa</i>		ib.
_____	<i>glabrata</i>		203
BUCIDA	<i>buceras</i>	Olive bark tree	*20
	ORDER 2.—DIGYNIA.		
TRIANTHEMA	<i>monogynia</i>	Horse purslane	384
	ORDER 3.—TRIGYNIA.		
ERYTHROXYLON	<i>areolatum</i>	Red wood	*116
_____	<i>rotundifolium</i>		ib.
MALPIGHIA	<i>glabra</i>	Barbadoes cherry	48
_____	<i>punicifolia</i>		49
_____	<i>verbascifolia</i>		ib.
_____	<i>nitida</i>		ib.
_____	<i>urens</i>	Cowhage cherry	ib.
_____	<i>crassifolia</i>		50
_____	<i>coriacea</i>		ib.
BANISTERIA	<i>laurifolia</i>	None	45
_____	<i>longifolia</i>		ib.
_____	<i>fulgens</i>		ib.
_____	<i>cærulea</i>		46
TRIOPTERIS	<i>jamaicensis</i>	None	*238
_____	<i>citrifolia</i>		*239
	ORDER 4.—PENTAGYNIA.		
OXALIS	<i>stricta</i>	Wood sorrel	*304
SPONDIAS	<i>mombin</i>	Spanish plum	*185
_____	<i>myrobalana</i>	Jamaica plum	*186
AVERRHOA	<i>bilimbi</i> E	Bilimbi fruit	87
SURIANA	<i>maritima</i>	None	*216

ORDER

HORTUS JAMAICENSIS.

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Genus

Species

English name

ORDER 5.—DECAGYNIA.

PHYTOLACCA

decandra
octandra

Pokeweed

*79
*80

CLASS XI.—ORDER I.

DODECANDRIA MONOGYNIA.

1. No corolla.

BOCCONIA

frutescens

Celandine

170

2. Corolla in four divisions.

RIZOPHORA
CRATEVA

mangle
tapia
gynandra

Mangrove
Garlic pear tree

487
317
318

3. Corolla five-petaled.

TRIUMFETTA
HUDSONIA
CANELLA
PORTULACCA

semitriloba
arborea
alba
oleracea
halimoides
pilosa
fruticosa

Bur bark
Yellow sanders
Wild cinnamon
Purslane

125
*310
194
*107
*108
ib.
*109

4. Corolla six-petaled.

LYTHRUM

parsonsia
melanium
cuphoea
ciliatum
trinervia

Willow herb

*300
*301
ib.
*302
*125

BLAKEA

Wild rose

ORDER 3.—TRYGYNIA.

EUPHORBIA

maculata
glabrata
tithymaloides
hypericifolia
hirta
hyssopifolia
chamasyce
graminea
myrtifolia
obliterata
punicea

Eyebright
Spurge

286
*296
ib.
*197
ib.
*198
ib.
ib.
*199
ib.
ib.

CLASS XII.—ORDER 1.

ICOSANDRIA MONOGYNIA

1. *Calyx superior.*

Genus	Species	English name	
CACTUS	<i>opuntia</i>	Prickly pear	409
	<i>cochinellifer</i>	Cochineal	410
	<i>tuna</i>	Prickly pear	412
	<i>alatus</i>		ib.
	<i>pendulus</i>	Cereus	ib.
	<i>triangularis</i>	Ditto	413
	<i>flagelliformes</i>	Ditto	ib.
	<i>pereskia</i>	Barbadoes goose-berry	414
	<i>melocactus</i>	Melon thistle	503
	<i>repandus</i>	Dildoe or torch thistle	*235
	<i>peruvianus</i>	Ditto	236
	<i>portulacifolius</i>		ib.
EUGENIA	<i>jambos</i> E.	Rose apple	*127
PSIDIUM	<i>pyriferum</i>	Guava	350
	<i>montanum</i>	Mountain guava	351
MYRTUS	<i>acris</i>	Bay berry	75
	<i>cerasina</i>	Black cherry	98
	<i>biflora</i>	Myrtles	537
	<i>alpina</i>		ib.
	<i>disticha</i>		538
	<i>monticola</i>		ib.
	<i>axillaris</i>		ib.
	<i>virgultosa</i>		ib.
	<i>fragrans</i>		ib.
	<i>pimenta</i>	Pimenta	*66
PUNICA	<i>granatum</i>	Pomegranate	*88
	<i>nana</i>		*89
CALYPTRANTHES	<i>chytracula</i>	Bastard green heart	61
	<i>zuzygium</i>		62
	<i>rigida</i>		ib.

2. *Calyx inferior.*

PRUNUS	<i>sphaerocarpa</i>	West India laurel	*276
	<i>occidentalis</i>		*277
CHRYSOBALANUS	<i>icaco</i>	Cocoa plum	211

ORDER 3.—TRIGYNIA.

SESUVIUM	<i>portulacrastum</i>	Seaside purslane	*157
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ORDER 4.—PENTAGYNIA.

PYRUS	<i>malus</i>	Apple	24
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ORDER

Genus Species English name.

ORDER 5.—POLYGYNIA.

ROSA		Rose	*125
RUBUS	<i>jamaicensis</i>	Blackberry bramble	98
GEUM	<i>virginianum</i>	Avens	36

CLASS XIII.—ORDER I.

POLYANDRIA MONOGYNIA.

1. One petaled.

MARCGRAVIA	<i>umbellata</i>	None	490
TERNSTROEMIA	<i>meridionalis</i>	None	*226

2. Four petaled.

CAPPARIS	<i>cynophallophora</i>	Bottle cod root	103
	<i>baducea</i>	Mustard shrub	ib.
	<i>ferruginea</i>	Ditto	ib.
	<i>torulosa</i>		109
	<i>longifolia</i>		ib.
	<i>siliquosa</i>		ib.
	<i>jamaicensis</i>		ib.
	<i>breynia</i>		ib.
CALOPHYLLUM	<i>calaba</i>	Santa Maria tree	*139
GRIAS	<i>cauliflora</i>	Anchovy pear	19

3. Five petaled.

MENTZELIA	<i>aspera</i>	None	504
LEGNOTIS	<i>elliptica</i>	None	441
CORCHORUS	<i>siliquosus</i>	Broom weed	117
	<i>æstuans</i>		ib.
	<i>olitorius</i> E.	Jews mallow	118
	<i>capsularis</i> E.		ib.
MUNTINGIA	<i>calabura</i>	None	527
EROTIUM	<i>thæoides</i>	None	283
	<i>undulatum</i>		ib.

4. Six petaled.

ARGEMONE	<i>mexicana</i>	Yellow thistle	*311
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5. Ten petaled.

BIXA	<i>orellana</i>	Arnotto	27
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6. Many petaled.

NYPHÆA	<i>lorus</i>	Water lilly	*271
	<i>alba</i>		ib.
	<i>nclumbo</i>		272
		LETIA	

HORTUS JAMAICENSIS.

<i>Genus.</i>	<i>Species.</i>	<i>English name.</i>	
<u>LÆTIA</u>	<i>guidonia</i>	Rodwood	120
	<i>thamnia</i>		<i>ib.</i>
	ORDER 3.— <i>TRIGYNIA.</i>		
HOMALIUM	<i>racemosum</i>	None	380
	ORDER 7.— <i>POLYGYNIA.</i>		
CLEMATIS	<i>dioica</i>	Virgin's bower	*262
<u>XYLOPIA</u>	<i>muricata</i>	Bitter wood	97
	<i>glabra</i>		<i>ib.</i>
<u>UVARIA</u>	<i>alba</i>	Lancewood	438
	<i>nigra</i>	Ditto	439
<u>ANNOA</u>	<i>palustris</i>	Alligator apple	11
	<i>tripetala</i>	Cherimoya	178
	<i>reticulata</i>	Custard apple	256
	<i>myristica</i>	American nutmeg	*10
	<i>muricata</i>	Sour sop	*179
	<i>squamosa</i>	Sweet sop	*180

CLASS XIV.—ORDER I.

*DIDYNAMIA GYMNOSPERMIA.*1. *Calyx subquinquefid.*

GLECHOMA	<i>hederacea</i>	Ground Ivy	247
<u>MENTHA</u>	<i>viridis</i> E.	Mint	*606
	<i>piperita</i> E.	Peppermint	<i>ib.</i>
	<i>pulegium</i> E.	Pennyroyal	507
LAVANDULA	<i>spica</i> E.	Lavender	439
TEUCRIUM	<i>inflatum</i>	Germander	319
NEPETA	<i>cataria</i> E.	Cat mint	168
SATUREIA	<i>viminea</i>	Savory	*147
BALLOTA	<i>suaveolens</i>	Spikenard	*189

2. *Calyx two-lipped.*

THYMUS	<i>vulgaris</i> E.	Thyme	230
	<i>Brownei</i>		<i>ib.</i>
OCYUM	<i>basilicum</i>	Basil	53
CLINOPODIUM	<i>capitatum</i>	Wild hops	*282
MELISSA	<i>officinalis</i>	Balm	74
ORYGANUM	<i>majorana</i>	Marjoram	492
	<i>onites</i>		<i>ib.</i>

ORDER 2.—*ANGIOSPERMIA.*1. *Calyx undivided.*

TANACIUM	<i>jaroba</i>	Pear withe	*45
		TENACIUM	

Genus.	Species.	English name.	
TANACIUM	<i>parasiticum</i>		*46
	2. <i>Calyxes bifid.</i>		
CRESCENTIA	<i>eujete</i>	Calabash tree	139
	<i>cucurbitina</i>		141
	3. <i>Calyxes quadrifid.</i>		
LIPPIA	<i>cymosa</i>	None	454
LANTANA	<i>trifolia</i>	Wild sage	*293
	<i>annua</i>		*294
	<i>stricta</i>		ib.
	<i>camara</i>		ib.
	<i>involucrata</i>		*295
	<i>aculeata</i>		ib.
	4. <i>Calyxes five cleft.</i>		
AVICENNIA	<i>tomentosa</i>	Olive mangrove	*21
BRUNFELSIA	<i>americana</i>	Trumpet flower	*240
	<i>undulata</i>		*241
COLUMNEA	<i>hirsuta</i>	Achimenes	3
	<i>hispida</i>		4
	<i>rutilans</i>		ib.
GESNERIA	<i>pulchella</i>		320
	<i>acaulis</i>		321
	<i>tomentosa</i>		ib.
	<i>grandis</i>		322
	<i>scabra</i>		ib.
	<i>corymbosa</i>		ib.
	<i>exserta</i>		ib.
	<i>calycina</i>		ib.
	<i>ventricosa</i>		ib.
	<i>pumila</i>		ib.
	<i>humilis</i>		ib.
STEMODIA	<i>maritima</i>	Sea side germander	*153
CAPRARIA	<i>biflora</i>	Goat weed	327
	<i>durantifolia</i>	Ditto	ib.
	<i>biflora</i>	West India tea	*277
RUELLIA	<i>paniculata</i>	Christmas pride	189
	<i>blechum</i>	Self heal	191
	<i>blechioides</i>		ib.
	<i>tuberosa</i>	Spirit leaf	*191
BUCHNERA	<i>elongata</i>		118
BIGNONIA	<i>longissima</i>	French oak	309
	<i>stans</i>		ib.
	<i>anguis cati</i>		310
	<i>leucorylon</i>	White wood	*278
SESAMUM	<i>orientale</i> E.	Vanglo	*251
		SESAMUM.	

HORTUS JAMAICENSIS.

Genus	Species	English name	
SESAMUM	<i>indicum</i> E.		*252
BESLERIA	<i>lutea</i>	None	85
VITEX	<i>umbrosa</i>	Chaste tree	176
CYTHAREXYLUM	<i>caudatum</i>	Fiddle wood	292
	<i>melanocardium</i>		<i>ib.</i>
	<i>cinereum</i>	Old woman's bitter	*20
VOLKAMERIA	<i>aculeata</i>	None	*264
DURANTA	<i>ellisia</i>	None	275
BONTIA	<i>daphnoides</i>	Wild olive of Barbados	*285

CLASS XV.—ORDER 1.

TETRADYNAMIA SILICULOSA.

ALYSSUM	<i>incanum</i> E.	Allyssum	17
	<i>halimifolium</i> E.		<i>ib.</i>
COCHLEARIA	<i>armoraica</i> E.	Horse raddish	384
LEPIDIUM	<i>virginicum</i>	Pepper grass	*58
	<i>sativum</i>	Garden cress	*59

ORDER 2.—SILIQUOSA.

RAPHANUS	<i>sativus</i> E.	Raddish	*109
BRASSICA	<i>oleracea</i> E.	Cabbage	131
	<i>rapa</i> E.	Turnip	*247
CLEOME	<i>spinosa</i>	Bastard mustard	67
	<i>procumbens</i>		<i>ib.</i>
	<i>pentaphylla</i>		38
	<i>polygama</i>		<i>ib.</i>
SISYMBRIUM	<i>nasturtium</i>	Water cress	*269

CLASS XVI.—ORDER I.

MONODELPHIA TRIANDRIA.

TAMARINDUS	<i>indica</i>	Tamarind	*223
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ORDER 2.—PENTANDRIA.

OCHROMA	<i>lagopus</i>	Down tree	271
WALTHERIA	<i>americana</i>	None	*267
	<i>angustifolia</i>		*268
	<i>indica</i>		<i>ib.</i>
MELOCHIA	<i>pyramidata</i>	None	501
	<i>depressa</i>	Broomweed	502
	<i>venosa</i>	None	<i>ib.</i>
	<i>tomentosa</i>		<i>ib.</i>
	<i>nodiflora</i>		<i>ib.</i>
	<i>lupulina</i>		503

ORDER

HORTUS JAMAICENSIS.

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Genus	Species	English name	
ORDER 4—OCTANDRIA.			
PISTIA	<i>stratiotes</i>	Duck weed	272
ORDER 9.—POLYANDRIA.			
SIDA	<i>althæaefolia</i>	Marshmallow	492
—	<i>spinosa</i>		493
—	<i>ciliaris</i>		ib.
—	<i>rhombofolia</i>		ib.
—	<i>viscosa</i>		494
—	<i>urens</i>		ib.
—	<i>jamaicensis</i>		ib.
—	<i>periplocifolia</i>		495
—	<i>umbellata</i>		ib.
—	<i>paniculata</i>		ib.
—	<i>dumosa</i>		ib.
—	<i>arguta</i>		496
BOMBAX	<i>ceiba</i>	Silk cotton tree	242
—	<i>pentandrum</i>	Ditto	244
ADANSONIA	<i>digitata</i>	Baobab	46
GOSYPIUM	<i>barbadense</i>	Cotton shrub	238
—	<i>hirsutum</i>	Dit o	242
MALACHRA	<i>capitata</i>	Wild ochra	*285
MALVA	<i>rotundifolia</i> E.	Mallows	479
—	<i>spicata</i>		ib.
—	<i>coromandeliana</i>		ib.
URENA	<i>sinuata</i>	Indian mallow	416
—	<i>typhalea</i>		ib.
HIBISCUS	<i>mutabilis</i> E.	Changeable rose	175
—	<i>rosa sinensis</i> E	China rose	176
—	<i>sabdariffa</i>	Indian sorrel	418
—	<i>elatus</i>	Mountain mahoe	468
—	<i>tiliaceus</i>	Sea mahoe	469
—	<i>clypeatus</i>	Congo mahoe	ib.
—	<i>abelmoschus</i>	Musk ochra	533
—	<i>esculentus</i>	Ochra	*12
ACHANIA	<i>malvaviscus</i>	Shrubby mountain mahoe	2
—	<i>mollis</i>		3
—	<i>pilosa</i>		ib.
GORDONIA	<i>hæmatoxylon</i>	Loblolly bay	461

CLASS XVII.—ORDER III.

DIADELPHIA OCTANDRIA.

POLYGALA	<i>diversifolia</i>	Bastard lignum vitæ	447
—	<i>paniculata</i>	Milkwort	448

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SECARIDACA

HORTUS JAMAICENSIS.

Genus	Species	English name	
SECURIDACA	<i>scandens</i>	None	160
	<i>virgata</i>		ib.
ORDER 4.—DECANDRIA.			
1. With all the stamens connected.			
PTEROCARPUS	<i>ecastaphyllum</i>	None	*106
AMERIMNUM	<i>Brownei</i>	Jamaica ebony	278
	<i>ebenus</i>	Ditto	ib.
AMORPHA	<i>fruticosa</i> E.	Bastard indigo	63
ERYTHRYNA	<i>corrallo dendron</i>	Coral or red bean tree	233
ABRUS	<i>precatorius</i>	Wild liquorice	456
TERAMNUS	<i>volubilis</i>	None	*225
	<i>uncinatus</i>		*226
PISCIDIA	<i>erythryna</i>	Dogwood	268
	<i>carthaginensis</i>	Ditto mountain	270
ULEX	<i>europæus</i> E.	Furze	311
	<i>capensis</i> E.		ib.
ARACHIS	<i>hypogæa</i>	Ground nuts	343
CROTALARIA	<i>latifolia</i>	Rattlewort	*114
	<i>incana</i>		ib.
	<i>sagittalis</i>		ib.
PISUM	<i>sativum</i> E.	English pea	*44
2. Stigma pubescent; stamens diadelphous.			
PHASEOLUS	<i>vulgaris</i>	Kidney bean	433
	<i>sphaerospermus</i>	Black eyed pea	99
	<i>lathyroides</i>		100
DOLICHOS	<i>filiformis</i>	Cat claws	166
	<i>roseus</i>	Sea bean	ib.
	<i>repens</i>	Ditto	167
	<i>minimus</i>	Wart herb	ib.
	<i>luteus</i>		ib.
	<i>pruriens</i>	Cowitch	244
	<i>ensiformis</i>	Horse bean	382
	<i>urens</i>	Horse eye bean	383
3. Legumes subarticulate; stamens diadelphous.			
AEYSCHYNOMENE	<i>americana</i>	Bastard sensitive	73
	<i>grandiflora</i> E.	Choiseul pea	74
	<i>sesban</i> E.		ib.
	<i>aquatica</i> E.	Swamp pea	ib.
HEDYSARUM	<i>diphyllum</i>	French honeysuckle	305
	<i>adscendens</i>		ib.
	<i>supinum</i>		ib.
	<i>canum</i>		ib.
	<i>trigonum</i>		306
	<i>scorpiurus</i>	Hare's foot honeysuckle	ib.
		HEDYSARUM	

Genus	Species	English name	
HEDYSARUM	<i>canescens</i>		306
	<i>tortuosum</i>	Cock's head	ib.
	<i>spirale</i>		307
	<i>axillare</i>		ib.
	<i>triflorum</i>		ib.
	<i>barbatum</i>		ib.
	<i>gyrans</i>	Moving plant	308
STYLOSANTHUS	<i>procumbens</i>	Trefoil	*237
	<i>viscosa</i>		*238
ORNITHOPUS	<i>tetraphyllous</i>	Bird's foot	94
4. Legume one-celled, many seeded, diadelphous.			
GLYCINE	<i>phaseolides</i>	Red bead vine	*114
	<i>reticulata</i>		ib.
CLITORIA	<i>brasiliensis</i>	Blue pea flower	102
	<i>virginiana</i>		ib.
	<i>galactia</i>		ib.
INDIGOFERA	<i>tinctoria</i>	Indigo	419
	<i>guatimala</i>	Ditto	420
	<i>anil</i>	Ditto	ib.
CYTISUS	<i>cajan</i>	Pigeon pea	*64
GALEGA	<i>cinerea</i>	Goat rue	326
	<i>toxicaria</i>	Surinam poison	*217
GEOFFROYA	<i>inermis</i>	Cabbage bark tree	130

CLASS XVIII.—ORDER I.

POLYADELPHIA DECANDRIA.

THEOBROMA	<i>cacao</i>	Chocolate tree	183
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ORDER 2.—DODECANDRIA.

BUXBOMA	<i>guazuma</i>	Bastard cedar	59
ABROMA	<i>angusta</i> E.		13

ORDER 3.—ICOSANDRIA.

CITRUS	<i>medica</i>	Citron	196
	<i>lima</i>	Lime and Lemon	451
	<i>aurantium</i>	Orange	*23
	<i>decumana</i>	Shaddock	*171

ORDER 4.—POLYANDRIA.

SYMPLOCOS	<i>octopetala</i>	None	*221
ASCYRUM	<i>hypericoides</i>	Peter's Wort	*61

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CLASS

CLASS XIX.—ORDER I.

SYNGENESIA POLYGAMIA AQUALIS

1. With all the corollets ligulate.

Genus.	Species.	English name.	
LACTUCA	<i>sativa</i> E.	Lettuce	442
SONCHUS	<i>agrostis</i>	Sow thistle	*181

2. Flowers in a head, all the corollets tubular, spreading at the tip.

CARTHAMUS	<i>tinctorius</i> E.	Bastard saffron.	72
CYNARA	<i>scolymus</i> E.	Artichoke	34
—	<i>cardunculus</i> E.	Cardoon	154

3. All the corollets tubular, erect parallel, flattish at the tip, dense.

CALEA	<i>lobata</i>	Halbert weed	363
—	<i>jamaicensis</i>		ib.
—	<i>oppositifolia</i>		364
—	<i>scoparia</i>	Mountain broom weed	520
BIDENS	<i>bipinnata</i>	Spanish nettle	*183
—	<i>scandens</i>		*184
—	<i>hirsuta</i>		ib.
—	<i>nivea</i>		ib.
SPILANTHUS	<i>uliginosus</i>	None	*191
LAVENIA	<i>decumbens</i>	None	440
EUPATORIUM	<i>dalea</i>	Hemp agrimony	369
—	<i>paviflorum</i>		370
—	<i>houstoni</i>		ib.
—	<i>hastatum</i>		ib.
—	<i>nervosum</i>		ib.
—	<i>rigidum</i>		371
—	<i>molle</i>		ib.
—	<i>villosum</i>		ib.
—	<i>cordifolium</i>		ib.
—	<i>montanum</i>		ib.
—	<i>odoratum</i>	Archangel	ib.
—	<i>ivæfolium</i>		372
AGERATUM	<i>conyzoides</i>	Bastard hemp agrimony	62
ETHULIA	<i>strachium</i>	None	285

ORDER 2 — POLYGAMIA SUPERFLUA.

1. Corollets of the ray obscure or none.

ARTEMISIA	<i>absinthium</i> E.	Wormwood	*306
TANACETUM	<i>vulgare</i> E.	Tansey	*225
CONYZA	<i>arborescens</i>	Fleabanes	299
—	<i>virgata</i>	Golden cudweed	300
—	<i>purpurascens</i>		ib.

CONYZA

HORTUS JAMAICENSIS.

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Genus	Species	English name.	
CONYZA	<i>rigida</i>		<i>ib.</i>
GNAPHALIUM	<i>americanum</i>	Cudweed	254
	<i>albescens</i>		255
	2. <i>Semiflosculous sub-bilabiate.</i>		
PERDICUM	<i>radiale</i>	None	*59
	3. <i>Corollets of the disk floscular; of the ray ligulate.</i>		
ERIGERON	<i>jamaicense</i>	Indian groundsel	414
	<i>revulare</i>		415
CINERARIA	<i>glabra</i>	Fleawort	300
	<i>discolor</i>		301
TUSSILAGO	<i>nutans</i>	Dandelion	260
	<i>albicans</i>		<i>ib.</i>
	<i>pumila</i>		<i>ib.</i>
TARGETES	<i>parula</i> E.	African marygold	309
	<i>erecta</i> E.		<i>ib.</i>
PECTIS	<i>tinifolia</i>	French marygold	308
ECLIPTA	<i>sessilis</i>		*318
BUPHTALMUM	<i>frutescens</i>	Ox-eye	*25
AMELLUS	<i>umbellatus</i>	Woundwort	*307
VERBESINA	<i>alata</i>	None	*256
	<i>nodiflora</i>		<i>ib.</i>
	<i>mutica</i>		<i>ib.</i>
	<i>pinnatifida</i>		*257
ORDER 3.—POLYGAMIA FRUSTRANEA.			
COREOPSIS	<i>alba</i>	Tick seeded sunflower	*230
	<i>reptans</i>		*231
HELIANTHUS	<i>annuus</i>	Sunflower	*214
ORDER 4.—POLYGAMIA NECESSARIA.			
CALENDULA	<i>officinalis</i> E.	Marygold	498
MELAMPODIUM	<i>humile</i>	None	500
TRIXIS	<i>terebinthenacea</i>	None	*240
SILPHIUM	<i>trilobatum</i>	Ox-eye, creeping	*25
ORDER 5.—SEGREGATÆ.			
ELEPHANTOPUS	<i>scaber</i>	Elephant's foot	281
	<i>spicatus</i>		<i>ib.</i>
	<i>angustifolius</i>		282
CLASS XX.—ORDER 1.			
GYNANDRIA DIANDRIA.			
ORCHIS	<i>monorrhiza</i>	Dog's stones	267
	<i>habenaria</i>		268
LIMODORUM			

Genus	Species	English name	
LIMODORUM	<i>altum</i>	Jamaica salop	396
	<i>tuberosum</i>		396
	<i>utriculatum</i>		ib.
	<i>gentianoides</i>		ib.
SATYRIUM	<i>plantagineum</i>	Satyrion	*143
	<i>hirtellum</i>		ib.
	<i>adnatum</i>		ib.
	<i>spirale</i>		ib.
	<i>orchioides</i>		ib.
	<i>elatum</i>		*144
SERAPIAS	<i>polystacha</i>	Helleborine	369
	<i>flava</i>		ib.
MALAXIS	<i>spicata</i>	None	478
	<i>umbelliflora</i>		ib.
CRANICHIS	<i>aphylla</i>	None	251
	<i>oligantha</i>		ib.
	<i>diphylla</i>		ib.
	<i>stachyodes</i>		ib.
	<i>muscosa</i>		ib.
EPIDENDRUM	<i>claviculatum</i>	Greenwithe	339
	<i>secundum</i>		340
	<i>lineare</i>		ib.
	<i>nocturnum</i>		ib.
	<i>ramosum</i>		341
	<i>mitans</i>		ib.
	<i>umbellatum</i>		ib.
	<i>anceps</i>		ib.
	<i>rigidum</i>		ib.
	<i>diffusum</i>		342
	<i>montanum</i>		ib.
	<i>serrulatum</i>		ib.
	<i>terretifolium</i>		ib.
	<i>globosum</i>		ib.
	<i>sertularioides</i>		ib.
	<i>testrefolium</i>		ib.
	<i>undulatum</i>		ib.
	<i>utricularioides</i>		343
	<i>triquetrum</i>		ib.
	<i>sessile</i>		ib.
	<i>flabelliforme</i>		ib.
	<i>subulatum</i>		ib.
	<i>tribuloides</i>		ib.
	<i>corniculatum</i>		ib.
	<i>lanceola</i>		ib.
	<i>angustifolium</i>		ib.
	<i>palmifolium</i>		ib.

EPIDENDRUM

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Genus	Species	English name.	
EPIDENDRUM	<i>altissimum</i>		343
	<i>fragrans</i>		344
	<i>sanguineum</i>		ib.
	<i>polybulbon</i>		ib.
	<i>proliferum</i>		ib.
	<i>vestitum</i>		ib.
	<i>tomiforme</i>		345
	<i>echinocarpon</i>		ib.
	<i>trichocarpon</i>		ib.
	<i>glaucum</i>		ib.
	<i>graminoides</i>		ib.
	<i>micranthum</i>		ib.
	<i>trigoniflorum</i>		ib.
	<i>racemiflorum</i>		ib.
	<i>laxum</i>		346
	<i>ovale</i>		ib.
	<i>pulchellum</i>		ib.
	<i>tridentatum</i>		ib.
	<i>cochlearifolium</i>		ib.
	<i>funale</i>		ib.
	<i>ruscifolium</i>		ib.
	<i>guttatum</i>		ib.
	<i>nodosum</i>		347
	<i>cochleatum</i>		ib.
	<i>vanilla</i>	Vanilla	*253

ORDER 4.—PENTANDRIA.

AYENIA	<i>pusilla</i>	None	39
	<i>laxigata</i>		ib.
PASSIFLORA	<i>murucuja</i>	Bull hoof	123
	<i>quadrangularis</i>	Granadilla	333
	<i>foetida</i>	Love in a mist	466
	<i>laurifolia</i>	Passion flower	*39
	<i>angustifolia</i>		*40
	<i>rubra</i>		ib.
	<i>perfoliata</i>		ib.
	<i>normalis</i>		*41
	<i>lunata</i>		ib.
	<i>capsularis</i>		ib.
	<i>rotundifolia</i>		*42
	<i>oblongata</i>		ib.
	<i>lutea</i>		ib.
	<i>parviflora</i>		ib.
	<i>minima</i>		*43
	<i>suberosa</i>		ib.
	<i>incarnata</i>		ib.

PASSIFLORA

Genus.	Species.	English name.	
<u>PASSIFLORA</u>	<i>cærulea</i>		*44
	<i>maliformis</i>	Water lemon	*270
	ORDER 5.— <i>GYNANDRIA</i> .		
<u>ARISTOLOCHIA</u>	<i>odoratissima</i>	Contrayerva	232
	<i>trilobata</i>		ib.
	<i>grandiflora</i>	Pelican flower	*46
	ORDER 7.— <i>DECANDRIA</i> .		
<u>HELICTERES</u>	<i>isora</i>	Screw tree	*152
	ORDER 9.— <i>POLYANDRIA</i> .		
<u>ARUM</u>	<i>colocasia</i>	Cocoës	212
	<i>peregrinum</i>	Scratch cocoë	213
	<i>seguinum</i>	Dumb cane	273
	<i>auritum</i>	Five finger	298
	<i>esculentum</i>	Indian Kale	415
	<i>sagittifolium</i>	Ditto	ib.
	<i>macrorhizon</i>		*265
	<i>hederaceum</i>		ib.
	<i>lingulatum</i>		ib.
	<i>funiculaceum</i>		*266

CLASS XXI.—ORDER 1.

MONOECIA MONANDRIA.

<u>CYNOMORIUM</u>	<i>jamaicense</i>	None	257
<u>ARTOCARPUS</u>	<i>incisa</i> E.	Bread fruit	112
	<i>integrifolia</i> E.	Jaack tree	388
	ORDER 3.— <i>TRIANDRIA</i> .		
<u>ZEa</u>	<i>mays</i>	Great Corn	336
<u>TRIPSACUM</u>	<i>hermaphroditum</i>		*239
<u>OLYRA</u>	<i>paniculata</i>	Job's tears	429
	<i>pauciflora</i>		ib.
<u>CAREX</u>	<i>hamata</i>	Sedge	*161
<u>SCLERIA</u>	<i>flagellum</i>	Hard grass	365
	<i>mitis</i>		366
	<i>filiformis</i>		ib.
	<i>hirtella</i>		ib.
	<i>latifolia</i>		367
<u>TYPHA</u>	<i>latifolia</i>	Cats tail	168
<u>TRAGIA</u>	<i>volubilis</i>	Creeping cowitch	250
	<i>mercurialis</i>		ib.
<u>HERNANDIA</u>	<i>sonora</i>	Jack in the box	389
<u>PHYLLANTHUS</u>	<i>nutans</i>	None	*61

ORDER

Genus.	Species.	English name.	
ORDER 4.—TETRANDRIA.			
URTICA	<i>grandiflora</i>	Dwarf elder	273
	<i>baccifera</i>	Nettle	*4
	<i>lappulacea</i>		ib.
	<i>sessiliflora</i>		ib.
	<i>elata</i>		ib.
	<i>microphylla</i>		ib.
	<i>parietaria</i>		*5
	<i>reticulata</i>		ib.
	<i>diffusa</i>		ib.
	<i>rufa</i>		ib.
	<i>nudicaulis</i>		ib.
	<i>ciliata</i>		ib.
	<i>radicans</i>		ib.
	<i>mumularifolia</i>		ib.
	<i>depressa</i>		*6
	<i>serrulata</i>		ib.
	<i>lucida</i>		ib.
	<i>cuneifolia</i>		ib.
BOEHMERIA	<i>caudata</i>	Nettle tree	ib.
	<i>cylindracea</i>		*7
	<i>ramiflora</i>		ib.
	<i>hirta</i>		ib.
MORUS	<i>tinctoria</i>	Mulberry	311
TRICERA	<i>laevigata</i>	Three horned Shrub	*229
ARGYTHAMNIA	<i>candicans</i>	None	26
ORDER 5.—PENTANDRIA.			
AMBROSIA	<i>elatior</i>	Wild tansey	*298
AMARANTHUS	<i>spinosus</i>	Calalue, prickly	143
	<i>viridis</i>		ib.
	<i>polygonoides</i>	Goose-foot	334
PARTHENIUM	<i>hysterophorus</i>	Wild wormwood	*299
ORDER 6.—HEXANDRIA.			
ZIZANIA	<i>aquatica</i>	Trumpet reed	*242
	<i>palustris</i>		*243
PHARUS	<i>latifolius</i>	Wild oats	*284
COCOS	<i>nucifera</i>	Cocoa nut tree	206
	<i>aculeata</i>	Macaw tree	467
	<i>guineensis</i>	Prickly pole	*94
GUETTARDA	<i>speciosa</i>	Pigeon wood	*65
	<i>elliptica</i>		*66
ORDER 8.—POLYANDRIA.			
HEDYOSMUM	<i>nutans</i>	Head-ache weed	267
	<i>arborescens</i>		ib.
		BEGONIA	

Genus.	Species.	English name.	
BEGONIA	<i>acutifolia</i>	Climbing sorrel	199
	<i>nitida</i>		200
	<i>acuminata</i>		201
	<i>scandens</i>		ib.
SAGITTARIA	<i>sagittifolia</i>	Arrow head	29
	<i>lancifolia</i>		ib.
CERATOPHYLLUM	<i>demersum</i>	Morass weed	513
ACIDOTON	<i>urens</i>	None	5
JUGLANS	<i>baccata</i>	Jamaica walnut	267
ORDER 9.—MONADELPHIA.			
HURA	<i>crepitans</i>	Sand box tree	*138
THUJA	<i>occidentalis</i> E.	Arbor vitæ	24
	<i>orientalis</i> E.		25
ARECA	<i>oleracea</i>	Cabbage tree	133
ACALYPHA	<i>reptans</i>	None	1
	<i>virginica</i>		1
	<i>virgata</i>		2
	<i>tomentosa</i>		ib.
	<i>angustifolia</i>		ib.
	<i>scabrosa</i>		ib.
	<i>betulaefolia</i>		ib.
RICINUS	<i>communis</i>	Oil nut	*19
	<i>inermis</i>		*14
HIPPOMANE	<i>biglandulosa</i>	Gum tree	361
	<i>mancinella</i>	Manchioneal tree	482
CROTON	<i>lineare</i>	Wild rosemary	*290
	<i>glabellum</i>		ib.
	<i>lucidum</i>		*291
	<i>humile</i>		ib.
	<i>flavens</i>		ib.
	<i>eluteria</i>		*292
	<i>pallens</i>		ib.
	<i>balsamiferum</i>		ib.
	<i>globosum</i>		ib.
	<i>populifolium</i>		*293
	<i>glandulosum</i>		ib.
	<i>macrophyllum</i>		ib.
	<i>nitens</i>		ib.
	<i>laurinum</i>		ib.
JATROPHA	<i>manihot</i>	Bitter and sweet cassada	161
	<i>gossypifolia</i>	Wild cassada	163
	<i>curcas</i>	Physic nut	*62
	<i>multifida</i>	Ditto French	*63
	<i>divaricata</i>		*64
ONPHALEA	<i>nucifera</i>	Cob nut	203
		ONPHALEA	

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Genus	Species	English name	
OMPHALEA	<i>cordata</i>		204
	<i>axillaris</i>		205
	<i>cauliflora</i>		ib.
ORDER 10.—SYNGENESIA.			
TRICHOSANTHES	<i>amara</i>	Snake gourd	*175
MOMORDICA	<i>balsamina</i>	Cerasee	172
	<i>charantia</i>	Ditto hairy	ib.
	<i>luffa</i>	Strainer vine	174
CUCUMIS	<i>anguria</i>	Wild cucumber	254
	<i>sativus</i> E	Cucumber	ib.
	<i>melo</i> E	Musk melon	531
CUCURBITA	<i>lagenaria</i>	Gourd	332
	<i>pepo</i>	Pompion	*89
	<i>melo</i> pepo	Squash	*201
	<i>citrullus</i>	Water melon	*273
SECHUM	<i>edule</i>	Cho-cho	182
BRYONIA	<i>racemosa</i>	Mountain bryony	118

CLASS XXII.—ORDER I.

DIOECIA, MONANDRIA.

BROSIMUM	<i>alicastrum</i>	Bread nut	414
	<i>spurius</i>	Milkwood	504

ORDER 2.—DIANDRIA.

CECROPIA	<i>peltata</i>	Trumpet tree	*243
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ORDER 3.—TRIANDRIA.

PHOENIX	<i>dactylifera</i> E	Date tree	261
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ORDER 4.—TETRANDRIA.

SCHÆFFERIA	<i>completa</i>	None	*150
TROPHIS	<i>americana</i>	Ramoon tree	*110
VISCUM	<i>verticillatum</i>	Mistletoe	507
	<i>opuntiioides</i>		508
	<i>flavens</i>		ib.
BATIS	<i>maritima</i>	Jamaica samphire	*137
MYRICA	<i>cerifera</i>	Candleberry myrtle	150

ORDER 5.—PENTANDRIA.

IRESENE	<i>celosia</i>	None	429
FEUILLEA	<i>cordifolia</i>	Antidote cocoon	23
PICRAMNIA	<i>antidesma</i>	Majoe bitter	476

Genus.	Species.	English name.	
ORDER 6.— <i>HEXANDRIA</i> .			
<i>SMILAX</i>	<i>china</i>	China root	180
	<i>laurifolia</i>	Prickly ditto	182
	<i>sarsaparilla</i> E.	Sarsaparilla	*141
<i>DIOSCOREA</i>	<i>sativa</i>	Negro yam	*308
	<i>alata</i>	White yam	*309
	<i>triloba</i>	Indian yam	ib.
	<i>aculeata</i>	Afou yam	ib.
	<i>oppositifolia</i>	Guinea yam	310
	<i>bulbifera</i>	Acom	ib.
<i>ELAeis</i>	<i>guineensis</i>	Palm-oil tree	*26
ORDER 9.— <i>DECANDRIA</i> .			
<i>CARICA</i>	<i>papaya</i>	Papaw tree	*36
	<i>proserpina</i>	Dwarf ditto	*38
ORDER 11.— <i>MONADELPHIA</i> .			
<i>CISSAMPELOS</i>	<i>pareira</i>	Velvet leaf	*254
	<i>caapeba</i>		ib.
<i>ALCHORNEA</i>	<i>latifolia</i>		*315
<i>ADELIA</i>	<i>bernardia</i>	None	6
	<i>ricinella</i>		ib.
	<i>acidoton</i>		ib.
<i>JUNIPERUS</i>	<i>bermudiana</i>	Bermudian cedar	83

CLASS XXIII.—ORDER I.

POLYGAMIA MONOECIA.

<i>ANACARDIUM</i>	<i>occidentale</i>	Cashew	158
<i>MUSA</i>	<i>paradisica</i>	Plantain tree	*72
	<i>sapientum</i>	Banana tree	*74
<i>HOLCUS</i>	<i>sorghum</i>	Guinea corn	351
	<i>saccharatus</i>	Guinea wheat	352
	<i>polygamum</i>	Guinea grass	353
<i>CHLORIS</i>	<i>cruciata</i>	Cruciated grass	252
	<i>ciliata</i>		253
	<i>petraea</i>		ib.
	<i>polydactyla</i>		ib.
	<i>radiata</i>		ib.
<i>ANDROPOGON</i>	<i>virginicum</i>	Mountain grass	523
	<i>bicorne</i>	Fox tail grass	ib.
	<i>insulare</i>	Sour grass	ib.
	<i>alopecuroides</i>		ib.
	<i>saccharoides</i>		524
	<i>fastigiatus</i>		ib.
	<i>brevifolius</i>		ib.

Genus	Species	English name.	
APLUDA	zeugites	Mountain reed grass	525
VALANTIA	hypocarpa	Crosswort	252
CELTIS	micrantha	Jamaica nettle tree	394
	americana		ib.
GUANIA	domingensis	Chaw stick	177
MIMOSA	scandens	Cacoons	137
	tortuosa E.	Cashaw	156
	juliflora E.	Poponax	ib.
	nilotica E.	Gum arabic tree	359
	inga	Inga tree	428
	unguis cati	Nephritic tree	*2
	viva	Sensitive plant	*167
	cineraria		*168
	punctata		ib.
	pernambucana		ib.
	comosa		ib.
	mangensis		ib.
	asperata		*169
	arborea	Wild tamarind	*297
	trifoliata	None	387
HYPELATE	latifolia	Broad leaf	116
TERMINALIA	arbuscula		ib.
	flava	Balsam tree	41
CLUSIA	americana	Mammee tree	481
MAMMEA	exaltata		*128
ROTTBOELLIA	latifolia	Sea side laurel	*154
XYLOPHYLLA	angustifolia		*155
	arbuscula		ib.
	montana		ib.
ORDER 2.—DIOECIA.			
PISONIA	aculeata	Fingriga	296
	nigricans		297
DIOSPYROS	tetrasperma	Date plum	260
CHAMÆROPS	humilis	Palmeto, smaller	*28
BURSERIA	gummifera	Birch tree	92
BROSIMUM	alicastrum	Bread nut tree	114
	spurium	Milkwood tree	504
FICUS	carica E.	Fig	293
	virens	Wild fig tree	294
	americana		295

CLASS XXIV.—ORDER I.
CRYPTOGAMIA FILICES.

ACROSTICHUM	ferrugineum	Fork fern	301
	polypodioides		ib.

ACROSTICHEUM

Genus.	Species.	English name.	
ACROSTICHUM	aureum		301
	rufum		302
	sorbifolium		ib.
	marginatum		ib.
	sanctum		ib.
	trifoliatum		303
	ebenum		ib.
	calomelanos		ib.
	simplex		ib.
	petiolatum		304
	latifolium		ib.
	villosum		ib.
	muscosum		ib.
	serrulatum		ib.
	graminoides		ib.
	sulphureum		ib.
POLYPODIUM	lycopodioides	Polypody	*81
	angustifolium		ib.
	gramineum		ib.
	marginellum		ib.
	repens		ib.
	pisolelloides		ib.
	phyllitides		*82
	scolopendroides		ib.
	pendulum		ib.
	trichomanoides		*ib.
	myosuroides		ib.
	pectinatum		ib.
	aureum		ib.
	trifoliatum		*83
	muricatum		ib.
	semi-cordatum		ib.
	sagittatum		ib.
	exaltatum		ib.
	rhizophyllum		*84
	obliteratum		ib.
	crenatum		ib.
	simile		ib.
	dissimile		ib.
	reptans		ib.
	serra		*85
	tetragonum		ib.
	deltoidum		ib.
	cicutarium		ib.
	invisum		ib.
	coreacum		ib.
		POLYPODIUM	

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Genus	Species	English name	
POLYPODIUM	patens		*85
	hirtum		*86
	pubescens		ib.
	dichotomum		ib.
	arboreum		ib.
	villosum		*87
	spinosum		ib.
	denticulatum		ib.
	armatum		ib.
	glaucum		*88
	dissectum		ib.
	effusum		*192
	rhizophyllum	Spleenwort	ib.
	serratum		ib.
ASPLENIUM	plantagineum		*193
	nodosum		ib.
	salicifolium		ib.
	dentatum		ib.
	rhizophorum		194
	marginatum		ib.
	erosum		ib.
	proliferum		ib.
	pumilum		ib.
	dimidiatum		ib.
	fragrans		*195
	grandifolium		ib.
	dissectum		ib.
	præmorsum		ib.
HEMIONITIS	cicutarium		ib.
	lanceolata	Mule's fern	526
	parasitica		ib.
	palmata		ib.
	lineata		527
BLECHNUM PTERIS	occidentale	None	100
	angustifolia	Female fern	289
	lineata		ib.
	grandifolia		ib.
	longifolia		ib.
	denticulata		ib.
	vittata		ib.
	trichomanoides		ib.
	pedata		290
	caudata		ib.
	mutilata		ib.
	biaurita		ib.
	heterophylla		291
	aculeata		ib.
		LONCHITIS	

Genus	Species	English name	
LONCHITIS	<i>hirsuta</i>	Spleenwort, rough	*195
	<i>pedata</i>		ib.
ADIANTUM	<i>radiatum</i>	Maiden hair	472
	<i>serrulatum</i>		473
	<i>pumilum</i>		ib.
	<i>macrophyllum</i>		ib.
	<i>deltoideum</i>		ib.
	<i>villosum</i>		ib.
	<i>microphyllum</i>		474
	<i>striatum</i>		ib.
	<i>strictum</i>		ib.
	<i>denticulatum</i>		ib.
	<i>aculeatum</i>		ib.
	<i>trapeziforme</i>		ib.
	<i>tenerum</i>		475
	<i>fragile</i>		ib.
TRICHOMANES	<i>membranaceum</i>	Goldy locks	328
	<i>pusillum</i>		329
	<i>reptans</i>		ib.
	<i>asplenioides</i>		ib.
	<i>crinitum</i>		ib.
	<i>lucens</i>		ib.
	<i>sericeum</i>		ib.
	<i>tunbrigense</i>		ib.
	<i>fucoides</i>		ib.
	<i>ciliatum</i>		ib.
	<i>lineare</i>		ib.
	<i>undulatum</i>		330
	<i>scandens</i>		ib.
	<i>rigidum</i>		ib.
	<i>polyanthos</i>		ib.
	<i>claratum</i>		ib.
	<i>aculeatum</i>		ib.
MARATTIA	<i>alata</i>	None	489
EQUISELUM	<i>giganteum</i>	Horse tail	386
	<i>sylvaticum</i>		387
OPHIOGLOSSUM	<i>reticulatum</i>	Serpent's tongue	*170
	<i>palmatum</i>		ib.
	<i>scandens</i>		*171
OSMUNDA	<i>hirsuta</i>	Moonwort	510
	<i>adanthifolia</i>		ib.
	<i>peltata</i>		511
	<i>aurita</i>		ib.
	<i>lineata</i>		ib.
	<i>polypodioides</i>		ib.
LYCOPodium	<i>dichotomum</i>	Wolf's claw	*303

LOCOPodium

HORTUS JAMAICENSIS.

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Genus.	Species.	English name.
LYCOPODIUM	<i>plumosum</i>	#304
	<i>taxifolium</i>	ib.
	<i>squamosum</i>	ib.
MARSILIA	<i>quadrifolia</i>	496

ORDER 2.—MUSCI

POLYTRICHUM	<i>convolutum</i>	Many haired moss	513
BRYUM	<i>agrarium</i>	Field moss	ib.
	<i>acuminatum</i>		ib.
	<i>lycopodioides</i>		ib.
	<i>parasiticum</i>		ib.
	<i>calycinum</i>		514
FONTINALIS	<i>crispa</i>	Fountain moss	ib.
	<i>disticha</i>		ib.
	<i>filicina</i>		ib.
	<i>hypnoidea</i>		ib.
MNIUM	<i>tomentosum</i>	Spring moss	ib.
	<i>sphaerocarpon</i>		ib.
	<i>strictum</i>		ib.
HYPNUM	<i>spiniforme</i>	Feather moss	ib.
	<i>palmatum</i>		515
	<i>polypodioides</i>		ib.
	<i>asplenoides</i>		ib.
	<i>fulgens</i>		ib.
	<i>diaphanum</i>		ib.
	<i>albicans</i>		ib.
	<i>glabellum</i>		ib.
	<i>patulum</i>		ib.
	<i>reptans</i>		ib.
	<i>fasciculatum</i>		ib.
	<i>tamarisci</i>		ib.
	<i>nigrescens</i>		ib.
	<i>densum</i>		ib.
	<i>flexile</i>		516
	<i>compositum</i>		ib.
	<i>polytrychoides</i>		ib.
	<i>capillare</i>		ib.
	<i>depressum</i>		ib.
	<i>trihophyllum</i>		ib.
	<i>microphyllum</i>		ib.
	<i>cespitosum</i>		ib.
	<i>pungens</i>		ib.
	<i>congestum</i>		ib.
	<i>tetragonum</i>		ib.
	<i>torquatum</i>		ib.
	<i>cirrhosum</i>		ib.

Genus

Species

English name

ORDER 3.—*HEPATICAÆ*.

JUNGERMANNIA

adanthioides

517

cristata

ib.

prostrata

ib.

pallens

ib.

simplex

ib.

perfoliata

ib.

connata

ib.

tenera

ib.

serrulata

ib.

juniperoidea

ib.

capillaris

ib.

cupresina

518.

transversalis

ib.

flava

ib.

diffusa

ib.

stolonifera

ib.

brachiata

ib.

atrata

ib.

filiformis

ib.

filicina

ib.

tomentosa

ib.

bifaria

ib.

sinuata

519

fucoidea

ib.

bipinnata

ib.

dichotoma

ib.

linearis

ib.

polyphylla

ib.

MARCHANTIA

hirsuta

ib.

RICCIA

reticulata

ib.

ANTHOCEROS

crispus

Horn flower

281

ORDER 4.—*ALGAÆ*.

LICHEN

leucomelus

Liverwort

453

flavicans

459

luridus

ib.

fungoides

ib.

pannosus

ib.

impressus

ib.

gossypinus

ib.

pectus

ib.

cocoes

ib.

damæcornis

ib.

laciniatus

ib.

seratophyllus

ib.

LICHEN

HORTUS JAMAICENSIS.

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Genus	Species	English name.	
LICHEN	diaphanous		459
	marginellus		460
	vesiculosus		ib.
	dissectus		ib.
	tomentosus		ib.
	aggregatus		ib.
	melanocarpus		ib.
	ramulosus		ib.
FUCUS	turbinatus	Sea weeds	*157
	natans		*158
	acinarius		ib.
	vesiculosus		ib.
	triqueter		ib.
ULVA	pavonia		159
	lactuca		ib.
	montana		ib.
BYSSUS	sanguinea		ib.

ORDER 5.—FUNGI.

AGARICUS	striatus	Mushroom	528
	radiatus		529
BOLETUS	microporus		ib.
	sanguineous		ib.
	membranaceus		ib.
	villosus		ib.
	fasciatus		ib.
	hydroides		ib.
	resupinatus		ib.
CLATHRUS	cancellatus		ib.
CLAVARIA	fusca		530
HELVELLA	versecolor		ib.
	tremelina		ib.
	atrata		ib.
	pallida		ib.
HYDNUM	agaricoides		ib.
	resupinatum		ib.
	sericeum		ib.
PEZIZA	nigrescens		531
	flava		ib.
	lentifera		ib.
	auricula		ib.

HORTUS JAMAICENSIS.

DOUBTFUL GENERA.

BONACE BARK	<i>polyandria monogynia</i>	Class 13 or 1	*149
PIGEON, or ZEBRA WOOD	<i>polyandria monœcia</i>	— 23 — 1	36
PLUME TREE	<i>tetrandria monogynia</i>	— 4 — 1	106
SCARLET SEED	<i>pentandria monogynia</i>	— 5 — 1	*66
RICHY TREE	<i>octandria monogynia</i>	— 8 — 7	*77

ORDER 3.—FRAG.

128	Mushrooms	trichia	Agaricus
129		trichia	
130		trichia	
131		trichia	
132		trichia	
133		trichia	
134		trichia	
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199		trichia	
200		trichia	

AN

DOUBTFUL

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AN EXPLANATION OF THE TECHNICAL TERMS IN BOTANY.

- ABORTIVE flower.** Falling off without producing fruit.
- ABRUPT leaf.** A term used only in pinnate leaves, which are said to be abruptly pinnate, when they have neither leaflet, nor tendril, or clasper, at the end.
- ACAULIS.** Stemless; without stem or stalk.
- ACEROSE leaf.** Linear and permanent; as in *pine, fir*.
- ACICULAR.** Shaped like a small needle.
- ACINACIFORM leaf.** Fleshy, compressed; one edge convex and sharp, the other straighter and thicker, resembling a sabre, falchion, or scymitar.
- ACINI.** Granulations.—Linneus appropriates this term to the distinct component parts of the fruit in mulberry, blackberry, and raspberry.
- ACOTYLEDONOUS plants.** Without cotyledons or lobes to the seed; and consequently not having any seminal leaves; as in the class *cryptogamia*.
- ACULEATUS.** Prickly.
- ACULEUS.** A prickle.
- ACUMINATE** or sharp pointed.
- ADNATUS.** Adnate, adjoined, adhering, fastened, fixed or growing to.
- ADPRESSUS.** See *appressed*.
- ASCENDENS.** See *ascending*.
- ADVERSUM folium** (an adverse leaf). The upper side turned to the south.
- ÆQUALIS POLYGAMIA.** (Equal polygamy). The name of the first order in the class *syngenesia* of Linneus's system, containing those compound flowers, which have all the florets hermaphrodite and alike.
- AGGREGATE flower.** To assemble or collect together.
- AGGREGATÆ.** The name of the forty-eighth order of plants, in Linneus's *Fragments of a Natural Arrangement*, in *Philos. Bot.* containing such vegetables as have their flowers properly aggregate.
- ALA. Wing.** A membrane on the sides of a petiole or footstalk of a leaf; or attached to a seed or seed-vessel.
- ALBUMEN.** Used by Grew and Gærtner for the substance of the lobes of the seed; which corresponds with the white in an egg.
- ALBURNUM.** The soft white substance in trees, between the *liber* or inner bark and the wood, gradually acquiring solidity, and becoming genuine wood.
- AI GÆ (Flags).** The second of the seven families, and the eighth of the nine tribes or nations into which Linneus divides all vegetables. Comprehending such as have the root, leaves, and stem all in one; as the *lichens* or *liverworts*, *fuci* or *sea weeds*, &c.
- ALTERNATE** (*Alternus*) branches, leaves, peduncles, or flowers, coming out one after or above another, in a regular succession or gradation. Contrasted with *opposite*.
- Alternately-pinnate leaf.** When the leaflets or component leaves are arranged alternately on each side of the common petiole.
- ALVEOLATE receptacle.** Divided into open cells, like an honey-comb, with a seed lodged in each.

AMENT.

AMENT. In English, *catkin*, from the French *châton*, on account of its resemblance to a cat's tail.

AMENTACEÆ. The name of the sixteenth order in Linneus's Fragments of a Natural Method, in *Philosophia Botanica*, and of the fiftieth at the end of *Genera Plantarum*; also, of a class in Tournefort's, Boerhaave's, and Royen's systems. *Amentaceous* flowers; one species of the Aggregate; borne or growing in an ament or catkin.

AMPLEXICAULE folium; a stem-clasping leaf, embracing, clasping or surrounding the stem by its base. Some leaves go only half round; these are called *Semiamplexicaulia*.

ANCEPS caulis (an ancipital stem). Two edged or double-edged.

ANDROGYNOUS plant. Bearing male and female flowers on the same root, without any mixture of hermaphrodites.

Androgenous flowers, having stamens or pistils only.

ANGIOSPERMIA. The name of the second order in the class *Didynamia* of the Linnean system. It is so called, because the seeds are enclosed in a vessel or capsule; in opposition to the first order, *Gymnospermia*, which has naked seeds.

ANGULAR stem. Excavated or grooved longitudinally with more than two hollow angles.

ANNUAL plant or root; perishing within the compass of a year: opposed to *biennial* or *perennial*.

ANOMALOUS, Irregular.

ANTHER. A part of the flower, big with pollen or farina which it emits or explodes when ripe; or, big with granulated pollen, and that with fovilla. It forms a part of the stamen, and is placed on the top of the filament.

APETALOUS flower. Without any corolla.

APEX; the tip summit or end.

APHYLLOUS. Leafless, destitute of leaves.

APOPHYSIS. A process or excrescence from the receptacle of mosses.

APPENDICULATE. This term is applied to

a petiole, when it has a small leaf or leaves at the base.

APPRESSED. Pressed or squeezed close.

APPROXIMATING leaves. Growing very near each other.

ARACHNOIDEUS Cobwebbed. Covered with a thick interwoven pubescence, resembling a cobweb.

ARBOREOUS stem. Single, woody and permanent; as the trunk or bole of a tree. Opposed to shrubby, undershrubby, and herbaceous.

ARBORESCENT stem. From herbaceous becoming woody.

ARBUSTIVA. The name of the thirty-ninth order, in Linneus's Fragments of a Natural Arrangement, in *Philosophia Botanica*. The same with *Hesperideæ*, in his *Genera Plantarum*.

ARCUATUS, bowed. Bent like a bow.

ARIL. The outer coat of a seed falling off spontaneously; or, inclosing the seed partially.

ARISTA. See *Awn*.

ARTICULATUS, Jointed.

ASCENDING. From a horizontal direction gradually curved or bowed upwards.

ASPER, Rough with hairs.

ASPERIFOLIE (*rough-leaved*). The name of the 43d order in Linneus's *Fragmenta*, and of the 41st in his *Ordines Naturales*. Ray and others have the same natural order.

ASSURGENS petiolus. Rising up in a curve, declining at the base, but upright at the tip. A rising petiole—rising leaves.

ATTENUATUS. Attenuated, tapered or tapering.

AVENIUM folium. A veinless leaf, without perceptible veins.

Auriculatus and *Auritus*. See *Eared*.

AWN (*Arista*). A slender sharp process issuing from the glume or chaff, in corn and grasses. It is commonly called in English *the Beard*, but this term is otherwise applied. See *Beard*.

AWNED. (*Aristatus*). Having an awn. As the glume and anther.

AWNLESS

- AWNLESS** (*Muticus*). Having no awn; opposed to *awned*.
- AXIL** or *Axilla*. The angle formed by a branch with the stem, or by a leaf with the branch. So named from its similarity to the armpit. Some old writers call it *Ala*, but this term is otherwise appropriated.
- AXILLARY** leaves. Growing at the angles formed by the branches with the stem; or, inserted at the base of the branch. Axillary peduncle, scape, cirrus or tendril, and thorn; proceeding from the axils, or from the bosom of the leaves or branches.
- BACCA**, a berry.
- BACCIFEROUS**. Berry-bearing.
- BANNER** or Standard. The upper petal of a papilionaceous corolla.
- BARB**. A straight process, armed with several teeth pointing backwards like the sting of a bee.
- BARBATUS**. See *Bearded*.
- BEAKED**. Terminated by a process, shaped like the beak of a bird.
- BEARD**. In pubescence, parallel hairs; or a tuft of stiff hairs terminating the leaves.
- BEARDED**. Having parallel hairs, or tufts of hairs.
- BEARDLESS**. Void of parallel hairs or tufts.
- BELL-SHAPED**. Bell-form, or campanulate corolla. Swelling or bellying out, without any tube.
- BELLYING** or bellied. Swelling out in the middle.
- BERRY**. A succulent or pulpy pericarp or fruit, without valves, containing naked seeds.
- BICAPSULAR**. Having two capsules containing seeds, to each flower.
- BICORNES** (two-horned).
- BIENNIAL** root. Enduring two years and then perishing.
- BIFARIOUS** leaves. Pointing two ways; or, coming out only on opposite sides of a branch.
- BIFEROUS** plants. Bearing twice in a year.
- BIFID**. two-cleft, or cloven.
- BIFLOROUS**. Two-flowered, or bearing two flowers.
- BIGEMINATE** leaf. Twin-fork. A compound leaf, having a dichotomous or forked petiole, with several folioles or leaflets at the end of each division.
- BIJUGOUS** leaf. A pinnate leaf having two pairs of leaflets.
- BILABATE** or two lipped corolla.
- BILAMMELLATE** stigma. The form of a flattened sphere, longitudinally bifid.
- BILOBATE** leaf. Divided into two lobes.
- BILOCULAR**. Divided into two cells internally.
- BINA** folia. Two-fold leaves; or rather coming out two and two together, from the same place, or at the same joint of a branch.
- BINATE** leaf. Having a simple petiole connecting two leaflets at the top of it; a species of digitate leaf, which see.
- BIPARTIBILE**. Divisible into two.
- BIPARTITE**. Divided into two parts.
- BIPINNATE**, or doubly winged. When the common petiole has pinnate leaves on each side of it.
- BIPINNATIFID**, or doubly pinnatifid. When the common petiole has pinnatifid leaves on each side of it.
- BITERNATE** or doubly-ternate leaf. When a petiole has three ternate leaflets.
- BIVALVE**, or two-valved pericarp. In which the covering, or seed case, splits into two parts.
- BLADDER**. A distended membranaceous pericarp.
- BLUNT**, or *Obtuse*, leaf, perianth, capsule. Ending in a segment less than that of a circle. Opposed to sharp or acute.
- BOAT-SHAPED**, navicular or cymbiform; as the valve of some pericarps, and the carina of papilionaceous flowers.—Hollowed and resembling a boat in shape.
- BOLF**, the naked trunk of a tree.
- BORDER** or brim. The upper spreading part of a monopetalous or one-petaled corolla.
- BRACHIATE**. Having branches.
- BRACTEA**,

BRACTEA, bracte, or floral leaf.

BRACED. Furnished with bractes.

BRANCHED or branching. Furnished with lateral divisions.

BRANCHLET. A subdivision of a branch, a twig.

BRANCH PEDUNCLE. A peduncle springing from a branch.

BRISTLE. A species of pubescence, in form of a stiff roundish hair.

BRISTLE-SHAPED; of the thickness and length of a bristle.

BRISTLY. Set with bristles.

BULB (*bulbus*). A hybernacle, or winter receptacle of a plant, composed of the bases of past leaves, and placed immediately upon the root. It is vulgarly considered as a root; and was called so by botanists till Linneus corrected the error, and shewed that it was a single bud, enveloping the whole plant.

BULBOUS plants. Growing from bulbs.

BULLATE leaf. When the substance rises high above the veins, so as to appear like blisters.

BUNDLE or fascicle. Several roots, leaves, or flowers, collected together, or proceeding from the same point.

BURR. A prickly pericarp.

CADUCOUS. Falling off quickly.

CALAMARIÆ (from *calamus*, a reed). The thirteenth order in Linneus's Fragments of a Natural Arrangement, in *Philosophia Botanica*; and the third of the natural orders, at the end of *Genera Plantarum*. It contains the sedges, and other plants, allied to the grasses.

CALCARATUS calyx. Furnished with a spur. Calcaratum nectarium, a calcarate or spur-shaped nectary. In shape resembling a cock's spur.

CALYCANTHEMI. The fortieth order in Linneus's Fragments of a Natural Arrangement.

CALYCINE. Of or on the calyx; as calycine scales—calycine thorns.

CALYCLE. A row of small leaflets placed at the base of the calyx, on the outside.—Calycle of the seed is the outer

proper covering or crown of the seed, adhering to it in order to facilitate its dispersion.

CALYCLATE or calyceled. A calyx having a calycle or little cup at the base, on the outside.

CALYPTRA, calyptra, or veil. The calyx of mosses, covering the anther like a hood.

CALYX. The outer covering of the flower, or the first of the seven parts of fructification, formed, according to Linneus, of the *cortex* or outer bark.

CAMPANACEI. The thirty-second order in the Fragments of a Natural Method, by Linneus; containing plants with bell-shaped flowers.

CAMPANULATA. Bell-shaped.

CANALICULATUM. A canal or channel.

CANCELLATUS. Latice work.

CANDELARES (*candela*, a candle). The sixty-second order in Linneus's Fragments of a Natural Method.

CAPILLARY. Long and fine, like a hair.

CAPILLUS (a hair).

CAPITATÆ (*caput*, a head). The second division of the twenty-first order in Linneus's Fragments of a Natural Method, in *Philosophia Botanica*; and the first division of the forty-ninth order in the *Ordines Naturales*, at the end of *Genera Plantarum*.

CAPITATUS. Capitata, growing in a head.

CAPSULE. A membranaceous hollow pericarp, opening in some determinate manner; or, differently in different plants.

CARINA. The lower petal of a papilionaceous corolla.

CARINATED. A keeled leaf, and nectary. Having a longitudinal prominency upon the back, like the keel of a vessel.

CARNOSUM folium. A fleshy leaf.

CARTILAGINOUS leaf. Having the edge strengthened by a tough rim of a substance very different from the disk.

CARYOPHILLÆUS. Having five regular petals, ending at the bottom in a long, narrow claw. Hence Linneus has constituted an order of plants, called *Caryophyllææ*.

- See**, in his Fragments of a Natural Method, and his Natural Orders.
- CASTRATA**. Without anthers.
- CATKIN**. See *Ament*.
- CAUDA**. See *Pail*.
- CAUDEX**. The stem or trunk of a tree.
- CAULESCENT** plant. Having a stem different from that which produces the flower.
- CAULINE** leaf. Growing immediately on the stem, without the intervention of branches.
- CAULIS**. The stalk of herbs.
- CELL**. The hollow part of a pericarp, and particularly of a capsule in which the seeds are lodged.—According to the number of these, pericarps are called *one-celled*, *two-celled*, &c.
- CERNUUS**, *drooping*, and must be distinguished from *nutans*, *nodding*.
- CESPITOSA**. A cespitose or turfey plant, has many stems from the same root, usually forming a close thick carpet, or matted together.
- CHAFF**. The dry calyx of corn and grasses, in common language.
- CHAFFY** receptacle. In which the florets are divided by interposed chaffs or scales.
- CHANNELLED**. Hollowed above with a deep longitudinal groove; convex underneath. Applied to the stem, leaf, and petiole.
- CHINKED**. Applied to the outer bark of trees, especially old ones.
- CHIVE**. Put by some English writers for *stamen*.
- CICATRISATUS truncus**. A scarred stem — Marked with the remains of leaves that have fallen off.
- CHLIATUM**. The edge guarded by parallel bristles longitudinally.
- CINEREOUS**. The colour of wood ashes.
- CIRCINALIS vernatio**. A term in foliation or leafing; importing that the leaves are rolled in spirally downwards, the tip occupying the centre.
- CIRCUMSCISSA capsula**. Opening, not longitudinally or vertically, as in most capsules, but transversely or horizontally, like a snuff-box; usually about the middle, so as to fall nearly in two equal hemispheres.
- CIRREFERUM**. Tendril-bearing.
- CIRROSUM**. Terminating in a cirrus or tendril.
- CIRRUS**. See *Tendril*.
- CLAVATUS**. Club-shaped.
- CLAW**. The lower narrow part of the petal in a polypetalous corolla, by which it is fixed to the receptacle.
- CLEFT** leaf. Divided by linear sinuses, with straight margins.
- CLIMBING** plant. Ascending by means of tendrils, or sometimes by the stem or branches, but without twining, which see.
- CLUB-SHAPED**. Growing thicker toward the top.
- COADUNATA** folia (coadunate leaves). Several joined together, or united at the base.
- COADUNATAE**, the fifty-second of Linneus's Natural Orders.
- COARCTATUS**. Squeezed or pressed together.
- COATED** or tunicated. Composed of concentric layers, as the bulb of the onion; or clothed with membranes, as some stems.
- COBWEBBED**. Covered with a thick interwoven pubescence.
- COCCUM**. Linneus applies this term to some fruits of a particular structure, having several cells with a single seed in each.
- COCHLEATUM**. Screw-shaped or snail-shaped.
- COILED**. Bent or twisted like a rope.
- COLLUM**. The neck or upper part of the tube, in a monopetalous corolla.
- COLUMELLA**. The central pillar in a capsule.
- COLUMNAR**. Like the shaft of a column.
- COLUMNIFERÆ**. The name of the thirty-fourth order, in the Fragments of a Natural Method, in Linneus's *Philosophia Botanica*; the thirty-seventh of his Natural Orders, at the end of *Genera Plantarum*; and the fourteenth order of Royen's System. It includes the malvaceous, or mallow-like plants, which are to be found in the class *Monodelphia* of Linneus's Artificial System.

COMA. A species of bracte, terminating the stem in a tuft or bush. A spike of flowers terminated by a coma is named *Comose*; and plants with such flowers are ranged in the thirty-sixth of the Natural Orders in Linneus's *Philosophia Botanica*.

COMMON bud. Containing both leaves and flowers. Common peduncle, bearing several flowers.—Common perianth, inclosing several distinct fructifications, as in the class *Syngenesia*. Common receptacle, connecting several distinct fructifications, as in the same class.

COMPLETE flower. Furnished both with calyx and corolla.

COMPLICATE. Folded together, as the valves of the glume or chaff in some grasses.

COMPOSITE, or COMPOSITI. The name of the twenty-first order in the Fragments of a Natural Method in Linneus's *Philos. Botan.*—the forty-ninth of the Natural Orders in his *Gen. Pl.*—in Royen's System, and others. Comprising the plants with compound flowers.

COMPOUND (*compositus*) *stem*; dividing into branches.—*Leaf*: connecting several leaflets on one petiole, which in this case is called a common petiole.—*Flower*: a species of aggregate flower, containing several florets, enclosed in a common perianth, and on a common receptacle; with the anthers connected in a cylinder, as in the class *Syngenesia*.—*Raceme*: composed of several racemules, or small racemes.—*Spike*: composed of several spicules or spikelets.—*Corymb*: formed of several small corymbs.—*Umbel*: having all the rays or peduncles bearing umbellules, or small umbels at the top.—*Fructification*: consisting of several confluent florets; opposed to simple.

CONCAVE leaf. When the edge stands above the disk.

CONCEPTACLE or Follicle. A pericarp of one valve, opening longitudinally on one side, and having the seeds loose in it.

CONDENSED branches. Pressed or squeezed together, so close as almost to be incumbent, or lie over each other at their ends.

CONDUPLICATE, doubled together.

CONFERTUS. Crowded or clustered.

CONFLUENT leaves. United at the base; growing in tufts, so as to leave the intermediate parts of the stem bare. *Confluent lobes*; running into one another: in opposition to *distinct*.

CONGESTUS, heaped together.

CONGLOMERATE. When a branching peduncle bears flowers on very short pedicles, closely heaped and compacted together, without order.

CONIFERÆ. The fifteenth order in Linneus's Fragments of a Natural Method; and the fifty-first of the Natural Orders, at the end of *Gen. Pl.* Containing the cone-bearing trees. As *fir*, *pine*, *cypress*, *thuja*, &c.

CONJUGATE leaf (*folium conjugatum*). A pinnate leaf which has only one pair of leaflets. *Conjugate raceme*: having two racemes only, united by a common peduncle.

CONNATE leaf (*folium connatum*). When two opposite leaves are so united at their bases as to have the appearance of one leaf: as in the *Garden Honeysuckle*.—This term is applied also to filaments and anthers, united into one body; as in the classes *Monodelphia* and *Syngenesia*.

CONTORTÆ. (*to twist together*). The 29th order in the Fragments of a Natural Method, in *Philos. Bot.* and the 30th of the Natural Orders in *Gen. Pl. Lin.*

CONVERGING. Applied to the corolla, when the tips of the petals meet so as to close the flower; as in *Trollius*: to anthers, approaching or inclining towards each other, as in the class *Didynamia*: to the sleep of plants; when two opposite leaves are so closely applied to each other by their upper surfaces as to seem one leaf.

CONVEX leaf. Rising towards the centre; or, with the edge more contracted than the disk, so that the disk is raised.

CONVOLUTED.

CONVOLUTED. A term in veneration or foliation, signifying that the sides of the nascent leaves are rolled together like a scroll.

CORCULUM. The *corcle*, heart, or essence of the seed. The rudiment of the future plant.

CORDATE or heart-shaped leaf.

Cordate-oblong. A heart-shaped leaf lengthened out.

Cordate-lanceolate, Cordate-sagittate, &c. Partaking of the form of both leaves.

CORIACEOUS. Stiff like leather or parchment.

COROLLA. The second of the seven parts of fructification; or, the inner covering of the flower, formed, according to Linneus, of the *liber* or inner bark of the plant.

The diminutive *Corollet* or *Corrollule* (*Corrollula*) is used in speaking of the florets in aggregate flowers.

CORONARIÆ. The ninth order in Linneus's Fragments of a Natural Method; and the tenth of his Natural Orders; containing part of the Liliaceous plants, such as for their beauty are adapted to the making of garlands (*coronæ*).

CORONULA. A coronet or little crown to the seed.

CORTEX. The *outer bark* of a vegetable.

CORTICAL bud. Having its origin from the scales of the bark.

CORYDALES. The twenty-eighth order in Linneus's Fragments of a Natural Method, and the twenty-fourth of his Natural Orders.

CORYMB. *Corymbus* is a kind of spike, the flowers of which have each its proper pedicellus, or partial foot-stalk raised to a proportional height.

CORYMBIFERÆ. The name of one of Ray's classes, and of the third subdivision in the order of compound flowers, in Linneus's Natural Arrangement.

COSTATUM folium. A ribbed leaf.

COTYLEDON. The lobe, or placenta of the seed, destined to nourish the heart, and then to perish.

COWLED or *Cucullate* leaf (*folium cucullatum*). Wide at top, drawn to a point below.

CREeping root. Extending itself horizontally, and putting forth fibres.

CRENATE. Having the edge cut with angular or circular incisures, not inclining towards either extremity.

When the edge of a leaf is cut into very small notches, Linneus uses the diminutive *Crenulate*.

CRESCENT-SHAPED. Roundish, hollowed at the base, with posterior angles.

CRESTED. Having an appendage like a crest or tuft.

CRINITUS. Hairy, or having long hair, or beards resembling hair.

CRISPUM. Curled.

CROWN of the seed. An appendage to the top of many seeds, enabling them to disperse.

CRUCIFORM or *cross-shaped* corolla. Consisting of four equal petals, spreading out in form of a cross.

CRYPTOGAMIA. The name of the twenty-fourth class in the Linnean Artificial System, comprehending the vegetables whose fructification is concealed, or at least too minute to be observed by the naked eye.—It is divided into four orders.—1. *Filices* or Ferns.—2. *Musci* or Mosses.—3. *Algæ* or Flags.—4. *Fungi*. And lately, a 5th order, *Hepaticæ*.

CUCURBITACEÆ (*Cucurbita*, a gourd). The forty-fifth order of Linneus's Fragments of a Natural Method; and the thirty-fourth of his Natural Orders.

CULM. The stalk or stem of corn and grasses.

CULMINIÆ (*Culmen*, the top). The twenty-sixth order in Linneus's Fragments of a Natural Method.

CUNEIFORME. Wedge-shaped.

CURLED leaf. When the periphery is larger than the disk admits, and so becomes waved—or, is so luxuriant, that the disk is longer than the rib of the leaf; as in *Curled Parsley*.—All curled leaves are monsters, or productions of art.

- CURVED**, bowed, or bent inwards.
- CUSPIDATUM**. Having the end sharp, like the point of a spear—or, terminating in a bristly point.
- CYATHIFORMIS**. Glass-shaped or cup-shaped. Cylindric, only widening a little at the top.
- CYLINDRICAL**. Applied to stems, and some leaves, which are round, that is without angles.
- CYME** or **CYMA**. Signifies properly a sprout or tender shoot particularly of the cabbage. Flowers disposed in a cyme, are called *Cymose* flowers.—Hence
- CYMOSE**. The sixty-third of Linneus's Natural Orders in *Philosophia Botanica*.
- DEDALEUM**. A dædal leaf.—At the same time flexuose and lacerated; or winding and torn.
- DAGGER-POINTED**. Ending in a point like that of a dagger.
- DECAGYNIA**. Ten-styled.
- DECANDRIA**. Ten-stamened.
- DECAPHYLLUS**. Ten-leaved.
- DECEMFIDUS**. Cut into ten parts.
- DECEMLOCULARE**. A ten-celled pericarp or seed-vessel.
- DECIDUOUS**. Falling off.
- DECLINATUS**. Declined.
- DECOMPOUND** leaf. When the primary petiole is so divided that each part forms a compound leaf.
- DECUMBENT** flower. Having the stamens and pistils declined or bending down to the lower side of it.
- DECURRENT** leaf. A sessile leaf having its base extending downwards along the stem.
- DECURSIVELY-PINNATE** leaf. Having the leaflets decurrent, or running along the petiole.
- DECUSSATED**. Growing in pairs, which alternately cross each other at right angles; so that if the stem be viewed vertically, or the eye be directed right down it, the leaves or branches will appear to be in fours.
- DEFLEXUS**. Bowed or bending down arch-wise.
- DEFLOREATUS**. Having discharged the farina or pollen.
- DEFOLIATIO**. Defoliation, or shedding the leaves.
- DEHISCENTIA**. The gaping or opening of capsules.
- DELTOID** leaf. Shaped like a rhomb, having four angles, of which the lateral ones are less distant from the base than the others.
- DEMERSUM**. Growing below the surface of the water.
- DENSE** panicle. Having abundance of flowers very close.
- DENTATA**. Consisting of a concatenation of joints, resembling a necklace.
- DENTATUM** folium. Having horizontal points of the same consistence with the leaf, with a space between each.
- DENTICULATUS**. *Toothletted*, having small teeth or notches.
- DENUDATE** (*denuder*, to be stripped naked). The seventh of the Natural Orders, in Linneus's *Philos. Bot.* comprehending a few genera which have flowers that appear at a different time from the leaves, and therefore have a naked appearance, as *Colchicum*.
- DEPENDENS**. Hanging down.
- DEPRESSUM** folium. A depressed leaf.—Hollow in the middle; or, having the disk more depressed than the sides.
- DIADELPHIA**. The name of the seventeenth class, in Linneus's Artificial System; comprehending those plants which bear hermaphrodite flowers, with two sets of united stamens.—This is a natural class, with papilionaceous or pea flowers, and leguminous fruits.
- DIADELPHOUS** stamens. Stamens forming two brotherhoods. The filaments united in each of the two sets at bottom, but separate at top.
- DIANDRIA**. The second class of Linneus's Artificial System, comprehending all hermaphrodite flowers, which have two stamens.
- DICHOTOMOUS**. Dividing by pairs from top to bottom.
- Dichotomous corymbed*. Composed of corymbs, in which the pedicles divide and subdivide in pairs.

DIOCCOUS. Consisting of two cohering grains or cells, with one seed in each.

DICOTYILDONES. Those plants which have seeds that split into two lobes in germinating.

DIDYNAMIA. The name of the fourteenth class in Linneus's Artificial System, comprehending those plants which have hermaphrodite flowers, with four stamens in two pairs of different lengths; the outer pair longer, the middle pair shorter and converging. These flowers have one pistil, and the corolla is irregular—either *ringent* or *personate*.

DIFFORMIS flos. A difform, anomolous, or irregular flower, or corolla—The parts of which do not correspond either in size or proportion.

Difformis torsio. The twisting of a stem one way and then another.

Difformia folia. Difform leaves. Of different shapes on the same plant.

DIFFUSED stem. Having spreading branches—*Diffusa panicula*, hanging loose.

DIGITATE leaf. When a simple or undivided petiole connects several distinct leaflets at the end of it. The Digitate leaf, to correspond with the name, should have five leaflets spreading out like the open fingers; but Linneus makes *binate*, *ternate*, and *quinate* leaves to be species of the digitate; and the leaves of horse-chesnut, though they have more leaflets than five, are nevertheless called digitate.

DIGYNIA. The name of an order in Linneus's Artificial System, comprehending those plants which have two pistils to a flower. This order is the second in the first thirteen classes, except the ninth.

D. MIDIATUS. Halved.

DIOICA. A *diœcious* plant. Having male and female flowers on distinct individuals.—Hence

DICECIA. The twenty-second class in Linneus's Artificial System, comprehending those plants which have no hermaphrodite flowers; but male and female flowers on distinct individuals.

DIPETALOUS. Two-petalled.

DIPHYLLOUS. *Two-leaved.*

DISK of a leaf. The whole surface—*Disk* of a flower, is the central part in radiate compound flowers, consisting generally of regular corollules or florets: it is applied to other aggregate flowers, when the florets towards the middle differ from those in the circumference, as in umbels.

DISPERMUS. *Two-seeded.*

DISSECTUM. *Gashed.*

DISSIPIMENTUM. See *Partition*.

DISSILIENS pericarpium. A dissilient, bursting or elastic pericarp or fruit.

DISTICHUS. Two-ranked.

DISTINCT leaves. Quite separate from each other.

DIVARICATE. Standing out wide.

DIVERGING branches. Making a right angle with the stem.

DODECANDRIA. Twelve-stamened. The name of the eleventh class in Linneus's Artificial System; comprehending all those plants which have hermaphrodite flowers with from twelve to nineteen stamens inclusive.

DOLABRIFORME. *Axe* or *hatchet-shaped* leaf. Compressed, roundish, obtuse, gibbous on the outside with a sharp edge, roundish below.

DORSAL awn. Fixed to the back or outside of the glume, not springing from the end.

DOTTED leaf. Besprinkled or pounced with hollow dots or points.

DOWN is properly the English term for some sorts of pubescence; but it is used also for the *Pappus* or little crown, fixed on the top of some seeds, by which they fly.

DROOPING. The top or end pointing to the ground.

DRUPA. A *drupe* is the pulpy pericarp or fruit without valves, containing a nut or stone with a kernel.

DRUPACEÆ. The thirty-eighth order in Linneus's Fragments of a Natural Method; containing those trees which bear a drupe or plum.

DUMOSE (*dumus*, a bush). The nineteenth order

- order in Linneus's Fragments, in *Philos. Bot.* and the forty-third of the Natural Orders in *Gen. Pl.*
- EARED.** Having an appendage like a little ear.
- EBRACTEATUS.** A raceme or peduncle, without any bracte or floral leaf.
- ECALCARATA corolla.** A corolla without any spur, or spur-shaped nectary.
- ECHINATUM.** Beset with prickles like a hedge-hog.
- ECHINUS.** A burr, or prickly pericarp.
- EGLANDULOSUS petiolus.** A petiole without glands.
- EGRET.** From *Agrette*, the French term for the pappus, down, or feathery crown of some seeds.
- ELASTIC pericarp.** Throwing open or casting off its valves with a spring.
- EMARGINATE.** Notched at the end.
- ENERVIUM.** Nerveless.
- ENNEANDRIA.** Nine-stamened. The name of the ninth class in the Artificial System of Linneus; comprehending such plants as bear hermaphrodite flowers with nine stamens.
- ENNEAPETALA corolla.** A nine-petaled corolla.
- ENODIS.** Knotless.
- ENSATE (ensis, a sword).** The fifth order in Linneus's Fragments, and the sixth in the Natural Orders at the end of *Gen. Pl.* Containing some of the liliaceous plants, which have sword-shaped leaves.
- ENSIFORM.** Sword-shaped.
- ENTIRE.** Stem, quite single with scarce any branches.
- An entire leaf.** Undivided, without any sinus or opening in the edge.
- EPIDERMIS.** The outer dry and very thin coat or covering of a plant, corresponding with the scarf skin.
- EQUAL.** A calyx or corolla is said to be equal, when the parts are of the same size and figure.
- EQUITANTIA folia.** Equitant leaves; riding as it were over each other.
- ERECT or Upright.** When applied to a stem or branch, it is not taken strictly, but is so called, when it approaches to a perpendicular with the ground. When a stem or branch is entirely perpendicular without any bending, the word *strictus* is used.
- EROSUM.** Erode or gnawed. When a sinuate leaf has other very small obtuse sinuses on its edge. It has the appearance of being gnawed or eaten by insects.
- EXASPERATUS.** Roughened.
- EXPLANATUS.** Unfolded, or spread out flat.
- EXserta.** Protruded stamens or anthers.
- EXstIPULATUS.** Without stipules.
- EXsuccus.** Juiceless, without juice.
- EXTRAFOLIACEÆ stipulæ.** Extrafoliaceous stipules. Growing on the outside of the leaves, or below them.
- FACTUS.** Stuffed, crammed, or full, without any vacuities.
- FASCICLE,** a bundle. A species of inflorescence, or manner of flowering, in which several upright, parallel, fastigate, approximating flowers are collected together.
- Fascicularis radix;* a fascicular or fascicled root. A species of the tuberous, with the knobs collected in bundles.
- Fasciculata folia;* fascicled leaves. Growing in bundles or bunches from the same point.
- FASTIGIATUS.** A fastigate stem, having branches of an equal height. Penduncles are fastigate, when they elevate the fructifications in a bunch, so that they are all of an equal height, as if they had been shorn off horizontally—or, when they are so proportioned as to form an even surface at top, like a flat roof.
- FAVOSUM.** Honey-combed.
- FAUX.** The jaws, chaps, throat, or opening of the tube of the corolla.
- FERRUGINOUS colour.** The colour of rusty iron.
- FIBRE.** A thread or longitudinal canal, imbibing moisture from the earth.
- A branch or subdivision of a fibre is called a fibril.
- FILAMENT.** The thread-like part of the stamen, supporting the anther, and connecting it with the flower.
- FILICES.** Ferns. The fourth family, and the

- The sixth great tribe or nation, in Linneus's General Distribution of Vegetables. The first order of the class *Cryptogamia* in his Artificial System. The sixty-fourth order in his Fragments of a Natural Method; and the fifty-fifth of his Natural Orders, at the end of *Gen. Plantarum*.
- FILIFORM.** Thread-shaped. Of equal thickness from top to bottom, like a thread.
- FIMBRIATUS.** Fringed.
- FISTULOSUS.** A fistulous stem. Hollow like a pipe or reed.
- FLACCIDUS.** A flaccid stem or peduncle.—So feeble as not to support its own weight.
- FLAGELLUM.** A runner.
- FLEXUOSE.** Changing its direction in a curve—from joint to joint or from bud to bud in the stem.
- FLORET.** The partial or separate little flower of an aggregate flower.
- FOLIACEA.** Leafy.
- FOLIARIS cirrus.** A tendril placed on the leaf.—*Foliaris gemma.* A leaf bud.
- FOLLICULUS.** A follicle. A univalvular pericarp, opening on one side longitudinally, and having the seeds loose in it.
- FORNICATUS.** Arched or vaulted.
- FOVILLA.** A fine substance, imperceptible to the naked eye, exploded by the pollen in the anthers of flowers.
- FRINGED corolla.** The edge surrounded by hairs or bristles not parallel or so regularly disposed as in the *ciliate* corolla.
- FROND.** *Frons.* Linneus applies this term to the peculiar leafing of palms and ferns.
- FRUSTRANEA** (*frustra*, in vain) *polygamia.* The name of the third order in the class *Syngenesia* of Linneus's Artificial System; comprehending such of the compound flowers as have perfect florets in the disk producing seed; but imperfect florets in the ray, which for want of a stigma are barren.
- FRUTESCENS caulis.** A frutescent stem.—From herbaceous becoming shrubby.
- FRUTEX.** A shrub.
- FUGAX.** Fugacious, fleeting, of short continuance, soon falling off, as the corolla of some flowers.
- FULCRUM.** Fulcre, prop, or support.
- FUNGI.** Funguses or Mushrooms. The first of the great families, and the ninth of the nations, tribes, or casts, into which Linneus has distributed the whole vegetable world. Also the sixty-seventh order in his Fragments of a Natural Method; the fifty-eighth of his Natural Orders, and the fourth order of the class *Cryptogamia*, in his Artificial System.
- FURROWED,** fluted, or grooved.
- FUSIFORMIS.** Fusiform or spindle-shaped root.
- GALEA.** The upper lip of a ringent corolla.
- GAPE.** The opening between the two lips in an irregular corolla.
- GASHED leaf.** Having the sections or divisions usually determinate in their number, or at least more so than in the *laciniate* leaf.
- GENICULATUS.** Kneed.
- GENICULUM.** Knee, knot, or joint.
- GERMEN.** The rudiment of the fruit yet in embryo.
- GIBBOUS leaf.** Having both surfaces convex, by means of a very abundant pulp. This term, when applied to a perianth, means only swelling out at bottom.
- GLABER.** Smooth.
- GLADIATA.** Gladiate or sword-shaped.
- GLANDULA.** A gland or glandule. An excretory or secretory duct or vessel.
- GLOBOSUS.** Globose, globular, spherical.
- GLOMERATA.** The flowers grow pretty close together, in a globular or sub-globular form.
- GLOMERULUS.** A Glomerule, or small glome.
- GLOMUS,** a Glome, or roundish head of flowers.
- GLUMA.** Glume. The calyx or corolla of corn and grasses, formed of valves embracing the seed.
- GLUMOSUS flos.** A glumose flower is a kind of aggregate flower, having a filiform receptacle, with a common glume at the base.

GLUTINOSITAS.

- GLUTINOSITAS.** Glutinosity or glueiness.
- GRAMINA.** Grasses. The fifth family, and the second nation, tribe, or cast in Linneus's General Division of the Vegetable Kingdom. The fourteenth order in the Fragments of a Natural Method in *Philos. Botan.* and the fourth of the Natural Orders at the end of *Gen. Pl.*—In the Artificial System, most of the grasses are contained in the second order of the fifth class.
- GRANULATA radix.** A granulate root, consisting of several little tubers or fleshy knobs, resembling grains of corn.
- GYMNOSPERMA.** A plant bearing naked seeds, in opposition to that which has the seeds inclosed in a capsule or other vessel.
- GYMNOSPERMIA.** The name of the first order in the class *Didynamia*, in Linneus's Artificial Arrangement; comprehending those plants which have four stamens, of which the two middle ones are shorter than the two outer ones, within a ringent flower, succeeded by four naked seeds. These are the same with the *Labiati* of Tournefort; and the *Verticillatæ* of Ray, and Linneus in his Natural Orders.—See *Didynamia* and *Angiospermia*.
- GYNANDRIA.** The name of the twentieth class in the Linnean Artificial System, containing all plants with hermaphrodite flowers, which have the stamens growing upon the style; or else having an elongate receptacle bearing both stamens and styles. This class has been considerably reduced by some modern reformers, and the plants referred to other classes. Others have entirely dismissed it from the sexual system. The reduction appears reasonable; but the singularity of the order *Diandria* surely may demand a separate class for itself.
- HAMUS.** A hook.
- HAMOSUS.** Hooked. A bristle curved at the end.
- HASTATE leaf.** Resembling the head of a halbert. Triangular, hollowed at the base, and on the sides, with the angles spreading.
- Hatchet-form.* See *Dolabriformis*.
- HEDGE-HOGGED.** Beset with prickles.
- HEDGE-HOG-HOOKED.** A spike beset with prickles which are hooked at the end.
- HELMET.** The upper lip of a ringent corolla.
- HEPTANDRIA.** The seventh class in the system of Linneus, comprehending those plants which have seven stamens to the flowers.
- HERMAPHRODITE flower.** Having both anther and stigma. An *Hermaphrodite plant* is that which has only hermaphrodite flowers.
- HESPERIDÆ.** The name of the forty-first order in Linneus's Fragments of a Natural Method; containing only three genera—Citrus, Styrax, Garcinia.
- HEXAGYNIA.** One of the orders in the ninth and thirteenth classes of the Linnean system; containing those plants which have six styles in the flowers.
- HEXANDRIA.** The name of the sixth class in Linneus's system; comprehending those plants which have hermaphrodite flowers with six equal stamens.—This is a natural class, nearly the same with the *Lilia* or *Liliaceous plants* of other writers; and contains a great part of the sixth, ninth, tenth, and eleventh orders in Linneus's Natural Arrangement, with the admixture of some others.
- HEXAPETALOIDES.** Six petaled.
- HEXAPHYLLUS.** Six leaves.
- HILUM.** The eye—commonly so called in the bean. The external mark or scar of the umbilical chord on some seeds, where they adhere to the pericarp.
- HIRSUTUS.** Hirsute, rough with hair, shaggy.
- HIRTUS.** Rough haired.
- HISPIDUS.** Hispid. Beset with stiff bristles.
- HOLERACEÆ.** *Holeraceæ*, commonly written *Oleraceæ* (from *Olus*, anciently *Holus*, a pot-herb). The name of the twelfth order in Linneus's Natural Orders; and the fifty-third in his Fragments of a Natural Method, containing *Spinach*, *Beet*, &c. &c.
- HORIZONTAL.**

- HORIZONTAL leaf.** Making a right angle with the stem.
- HYALINE.** The colour of glass, with its transparency.
- HYBERNACULUM.** A compendium of the whole herb before it grows up. Or, in which the embryo of the future plant is inclosed by a scaly covering, and secured from external injury during the winter.
- HYBRIDA.** A monstrous vegetable produced from the mixture of two different species.
- HYPOCRATERIFORMIS.** Salver-shaped.
- JAG.** A division or cleft in a leaf, calyx, or corolla. This term relates chiefly to monophyllous calyxes and monopetalous corollas. These are named bifid, trifid, &c. according to the number of jags.
- JAGGED.** Cleft or divided.
- ICOSANDRIA.** The name of the twelfth class in the Linnean system; comprehending those plants which have hermaphrodite flowers with twenty or more stamens, growing on the inside of the calyx, not on the receptacle.—The situation and not the number of the stamens is here to be attended to.—The calyx also is monophyllous and concave in this class; and the claws of the petals are fixed into the inside of the calyx. To confound this class with *Polyandria* is abominable.
- IMBERBIS corolla.** A beardless corolla.
- IMBRICATE.** Lying over each other, like tiles on a roof.
- IMMERSED.** Growing under water.
- IMPARI-PINNATUM.** An unequally-pinnate leaf, terminated by an odd or single leaflet.
- INANIS.** Having a pith or spongy substance within.
- INCANUS.** Hoary.
- INCISUM.** Snipt or gashed.
- INCLUDENS.** Shutting up.
- INCRASSATUS pedunculus.** A peduncle incassated, thickening or becoming thicker towards the flower.
- INCUMBENT.** Leaning upon, or resting against.
- INCURVATUS.** Bowed or curved inwards.
- INNERME.** Unarmed; without thorns or prickles.
- INFERUM.** Inferior.
- INFLATUS.** Inflated. Hollow and puffed or blown up like a bladder.
- INFLEXUS.** Inflex or inflected. Bent upwards at the end, towards the stem.
- INFUNDIBULIFORMIS.** Funnel-shaped.
- INTERFOLIACEI.** Interfoliaceous flowers or peduncles. Between opposite leaves, but placed alternately with them.
- INTORSIO.** The writhing, bending, turning, twining or twisting of any part in a vegetable towards one side or other—or, in any direction from the vertical.
- INTORTUS.** Twisted.
- INTERFOLIACEÆ stipulæ.** Intrafoliaceous stipules. Growing above or within the leaves.
- INUNDATÆ.** The name of the forty-fifth order in Linneus's Fragments of a Natural Method, and the fifteenth of the Natural Orders in *Gen. Pl.*—Containing such plants as grow naturally in the water.
- INVOLUCRUM.** An involucre. A calyx remote from the flower, particularly in the umbel, but applied also to the whorl and other kinds of inflorescence.
- Involucrum universale.* A universal or rather general involucre, placed at the origin of the universal or general umbel.—*Partiale.* A partial involucre, at the origin of the partial umbel.—*Proprium,* a proper involucre, placed beneath a single flower.
- INVOLUTA.** Involute foliation or vernation. When leaves within the bud have their edges rolled spirally inwards on both sides towards the upper surface.
- JUGUM.** A yoke, couple, or pair of leaflets.
- JULUS.** A catkin or ament.
- KEEL.** The lower petal of a papilionaceous corolla, inclosing the stamens and pistil, usually shaped like a boat.
- Keeled.* Having a longitudinal prominency upon the back.
- KIDNEY-SHAPED.** Roundish, and hollowed at the base without angles. Applied also
- to

- to the anther and seed, which being solid bodies, have really the form of a kidney; whereas a leaf, being a plane surface, resembles the section of a kidney. This distinction is to be observed in several other cases.
- KNOTTED** or knotty. Having knots or swelling joints.
- LABIATUS**. A labiate or lipped flower.
- LACERA corollæ**. A lacerated corolla. Having the border very finely cut.
- A lacerated leaf. Having the edge variously cut into irregular segments—as if it were rent or torn.
- LACINIA corollæ**. Any part into which the border of a monopetalous corolla is cut.
- LACINIATUS**. Jagged.
- Lacinula**. A little jag, or subdivision of the larger one.
- LACTESCENTIA**. Lactescence or milkiness.
- LACUNOSUM folium**. A lacunose or pitted leaf. When the disk is depressed between the veins. Contrary to *rugosum*, wrinkled, in which it rises.
- LEVIS**. Even, level, very smooth, polished.
- LAMELLA**. A thin plate. Applied to the plates of which the under part in some funguses is composed; hence these are called *lamellated* or *lamellous* funguses.
- LAMINA**. The border.
- LANA**. Wool. Crooked or curling, close, thick hairs.
- Lanatus**. Woolly.
- LANCEOLATUM**. Lanceolate. Oblong, and gradually tapering towards each extremity, like the head of a lance.—Some call it spear-shaped, others lance-shaped or lanced.
- LANUGO**. Down. Soft hairs clothing the parts of plants.
- LATERIFOLIUS**. By the side of the base of the leaf.
- LAXUS**. A lax, loose, flaccid, or flexible stem.
- LEGUMEN**. A legume. A pericarp of two valves, in which the seeds are fixed along one suture only.
- LEGUMINOSÆ**. Leguminous plants. Such as have a legume for the pericarp. The same with the *Papilionacei* of Tournefort. It is one of Ray's classes.
- LENTICULARIS scabrities**. A sort of small glandular roughness, resembling small lentils, on the surface of some plants.
- LIGNOSUS caulis**. A woody stem. Opposed to herbaceous.
- LIGNUM**. The wood, or woody part of the trunk.
- LIGULATUS**. A ligulate or strap-shaped flower.
- LILIA**. The name of the third nation, tribe, or cast of vegetables, in Linneus's *Regnum Vegetabile*, containing the Patriarchian rank, eminent for their splendid flowers.
- Liliaceæ**. The name of one of Tournefort's classes. Also of the tenth order in Linneus's *Fragments of a Natural Method*.
- LIMBUS**. The border or upper dilated part of a monopetalous corolla.
- LINEARE folium**. A linear leaf. Of the same breadth throughout, except sometimes at one or both ends.
- Lineari-cuneiforme**. Linear-wedged-shaped. Between both, but inclining more to the latter.
- LINEATUM folium**. A lineate leaf. The surface slightly marked longitudinally with depressed parallel lines.
- LINGUIFORME**. Tongue-shaped. Linear and fleshy, blunt at the end, convex underneath, and having usually a cartilaginous border.
- LOBUS**. A lobe. The part into which some simple leaves are divided.
- LOBATUM folium**. A lobate or lobed leaf. Divided to the middle into parts distant from each other, with convex margins.
- LOCULAMENTUM**. The cell of a pericarp or fruit.
- Locus**. The little cell of an anther containing the pollen.
- LOMENTACEÆ**. (*Lomentum*, a sort of colour in Pliny, a *lotu*, being made by washing. But it also signifies *farina fricta*, parched meal, or, according to others, *farina fabacea*, bean meal).—The name of the fifty-sixth order in Linneus's

- Linneus's Fragments**, and of the thirty-third in his *Ordines Naturales*.
- LUCIDUM**. Bright, shining, as it were illuminated.
- LUNULATUM**. Shaped like a small crescent.
- LURIDE**. (*Luridus*, a dusky or livid colour. Linneus makes it synonymous with *fuscus*.) The name of the thirty-third order in Linneus's Fragments, and of the twenty-eighth in his *Ordines Naturales*.
- LYRATUM**. A lyrate or lyre-shaped leaf.—Divided transversely into several jags, the lower ones smaller and more remote from each other than the upper ones.
- MARCESCENS**. Withering, shrivelling.
- MEDULLA**. Marrow or pith.
- MEMBRANACEOUS**. The substance of parchment.
- METEORICÆ vigiliæ**. When flowers open and shut according to the temperature of the air.
- MID-RIB**. The main nerve or middle rib of the leaf, running from the base or petiole to the apex, and from which the veins of the leaf usually arise and spread.
- MONADELPHIA**. The name of the sixteenth class in the Linnean System. Comprehending those plants which have hermaphrodite flowers, with one set of united stamens. They form a natural class entitled *Columniferae*.
- MONANDRIA**. The name of the first class in the Linnean System. Comprehending those plants which have only one stamen in a hermaphrodite flower.
- MONOCOTYLEDONES plantæ**. Plants which have only one cotyledon or lobe in the seed; as *Grasses*, *Palms*, and *Liliaceous plants*. Linneus remarks that these are more properly *Acotyledonous*, since the cotyledon continues within the seed.
- MONŒCIA** (*House*.) The name of the twenty-first class in the Linnean System. Comprehending the androgynous plants, or such as produce male and female flowers, on the same individual, without any mixture of hermaphrodites.
- MONOGYNIA**. The name of the first order, in each of the thirteen first classes of the Linnean system. Comprehending such plants as have one pistil, or stigma only, in a flower.
- MONOPETALA corolla**. A monopetalous or one-petaled corolla. The whole in one petal. It may be cut deeply, but is not separated at the base.
- MONOPHYLLUM**. A monophyllous or one-leaved perianth. All in one; if cut, not separated to the base.
- MONOSPERMA**. A plant that has one seed to each flower.
- MONOSTACHYOUS**. A stem bearing a single spike.
- MUCRO**. A dagger-point.
- Mucronatum folium**. A dagger-pointed leaf.
- MULTANGULARIS**. A multangular stem.—Having several corners.
- MULTICAPSULARE**. A fruit of many capsules.
- MULTIDENTATA**. Many-toothed.
- MULTIFIDUM**. Multifid or many-cleft.
- MULTILOCLARE**. Many-celled. Divided internally into several cells.
- MULTIPARTITA**. Many parted.
- MULTIPLEX**. Many-fold, or having petals lying over each other in two or more folds or rows.
- MULTISILIQUÆ**. The name of the twenty-third order in the Fragments of a Natural Method, in *Philos. Bot.*; and of the twenty-sixth in the *Ordines Naturales*, at the end of Linneus's *Genera Plantarum*. Comprehending those plants which have several siliques or pods succeeding to each flower.
- MUNIENS somnus**. When the upper leaves of a plant, which during the day had spread out horizontally on long petioles, drop them at night, and hang down so as to form an arch all round about the stem.
- MURICATUS**. Muricated. Having subulate points scattered over it; or armed with sharp prickles, like the *Murex* shell-fish.
- MURICATÆ** for the name of the eleventh order in Linneus's Fragments of a Natural Method.

- MUSCI** Mosses. The third of the families, and the seventh of the nations or casts, into which Linneus has distributed all vegetables.—The sixty-fifth order in his *Fragments*; and the fifty-sixth of his *Ordines Naturales*.—They form the second order of the class *Cryptogamia*, in his Artificial System.
- MUTICUS**.—Awnless. Without any point at the end.
- NAP**. Soft interwoven hairs scarcely discernible.
- NAPPY** or **Tomentose**. Covered with a whitish down, or with hairs interwoven and scarcely distinguishable.
- NATANS**. Floating. Placed on the surface of the water, in many aquatic plants.
- NECTARIUM**. The nectary, or melliferous part of a vegetable, peculiar to the flower. It commonly makes a part of the corolla, but is sometimes entirely distinct from it, and is then called a *Proper* nectary. It is frequently in form of a horn or spur: sometimes it takes the shape of a cup, whence this part is named in English by some the *Honey cup*.
- NERVOSUM**. Nerved. Having vessels perfectly simple and unbranched, extending from the base towards the tip.
- NESTLING**. Applied to seeds which lie loose in pulp or cotton, within a berry or other pericarp.
- NITIDUM**. Glittering, glossy.
- NODDING**. When applied to a stem it is explained to mean, bent down outwards from the top: when applied to a flower it signifies that the peduncle is considerably curved.
- NUCLEUS**. A kernel. The seed of a nut and of stone fruits, contained within a shell.
- NUDIUSCULUS**. Almost, or rather naked.
- NUT**. *Nux*. A seed covered with a shell.—Extending not only to nuts commonly so called, but to the Acorn, and all stone-fruits.
- NUTANS**. *Nodding*.
- OBCORDATUM**. Obcordate or inversely heart-shaped; having the apex downwards.
- OBLIQUUM**. An oblique leaf. Having the base directed towards the sky, and the apex or point towards the horizon.
- Obliquus caulis*. An oblique stem. Neither perpendicular nor horizontal.
- OBLONGUM folium**. An oblong leaf. Having its longitudinal diameter several times exceeding the transverse one;—rounded at both ends, but the curvature of each less than the segment of a circle.
- Oblongiusculus*. Rather or somewhat oblong.
- Oblongo-ovatum folium*. An oblong-ovate leaf. Between both, but inclining most to the latter.
- OBOVATUM folium**. An obovate or inversely ovate leaf. Having the narrow end downwards, or next the petiole, branch, or stem.
- OBSOLETUS**. Worn out, scarcely distinguishable, very obscure.
- OBTUSUM**. Ending bluntly, but within the segment of a circle.
- Obtusiusculus*. Rather or somewhat obtuse or blunt—bluntish.
- OBVERSUM folium**. An obverse or vertical leaf. Having the base narrower than the top, so that they seem to have changed places.
- OBVOLUTA**. When (as the leaves lie in the bud) the margins alternately embrace the straight margin of the opposite leaf.
- OCTANDRIA**. The name of the eighth class in the Linnean system. Comprehending those plants which have hermaphrodite flowers with eight stamens.
- OPERCULUM**. A lid or cover to a capsule.
- OPPOSITA**. Opposite leaves. Growing in pairs, each pair decussated, or crossing that above and below it.
- ORBICULATUM folium**. An orbicular or circular leaf.
- ORCHIDÆ**. The name of the fourth order in Linneus's *Fragments*; and of the seventh in his *Ordines Naturales*; containing *Orchis* and other genera allied to it.
- OVALE folium**. An oval leaf. Having the longitudinal diameter longer than the transverse.

- transverse one, and the curvature the same at both ends.
- OVATUM folium.** An ovate or egg-shaped leaf. The longitudinal diameter exceeding the transverse one; the base a segment of a circle, but narrower at top.—The shape of this leaf is that of the longitudinal section of an egg.
- PAGINA.** The upper and lower surface of a leaf.
- PALATUM.** The palate. A prominency in the throat of a corolla, in Labiate flowers—or, a process of the lower lip, extending towards the upper part, by which the gape or opening is closed.
- PALEA.** A chaff. A thin membrane, springing from the receptacle, and separating the florets, in some aggregate flowers.
- PALME.** The sixth family, and the first of the nine great tribes, nations, or casts, into which Linneus has divided all vegetables. They are placed in the appendix to the Artificial System, and take the lead in the Natural Orders, though Linneus had placed them only in the second place in his Fragments of a Natural Method.
- PALMATA radix.** A palmate root. Consisting of several oblong tubers or knobs, spreading out like fingers.
- Palmatum folium.** A palmate or hand-shaped leaf. It resembles the hand with the fingers spread; whereas the *Digitate* leaf resembles the fingers spread without the hand.
- PANDURÆFORME.** Oblong, broader below, contracted on the sides.
- PANICULA.** A fructification, or species of inflorescence, in which the flowers or fruits are scattered on peduncles variously subdivided.
- PAPILIONACEA.** A papilionaceous or butterfly-shaped corolla.
- PAPPUS.** A feathery or hairy flying crown to the seed.
- PAPULOSUM folium.** A pimply, bladdery, or blistered leaf.
- PARASITICUS.** A parasitical stem or plant. Growing on some other plant, not on the ground.
- PARTIALIS umbella.** A partial umbel, otherwise called *Umbellula*. A smaller umbel, proceeding from the general or universal umbel.
- PARTITION.** A wall separating a pericarp internally into cells.
- PATENS folium.** A spreading leaf. Forming an acute angle with the stem or branch on which it is placed; between erect and horizontal.
- PECTINATUM folium.** A pectinate leaf. A sort of pinnate leaf, in which the leaflets are toothed like a comb.
- PEDATUM folium.** A pedate leaf. When a bifid petiole connects several leaflets on the inside only. This is a species of compound leaf, and bears some resemblance to a bird's foot.
- PEDATIFIDUM folium.** A pedatifid leaf.—This is to pedate, what pinnatifid is to pinnate; the parts of the leaf not being separate, but connected as in the feet of water fowl.
- PEDICELLUS.** A pedicel or pedicle.
- PEDUNCULUS.** A peduncle. By old writers called the *Foot-stalk*; by several moderns the *Fruit-stalk*.
- PELTA.** A flat fructification on some lichens, resembling a round shield.
- PELTATUM folium.** A peltate or target-shaped leaf. Having the petiole inserted into the disk of the leaf, instead of the edge or base, as is most usual.
- PENICILLIFORMIS appendix.** An appendix to the keel of the corolla in some sorts of *Polygala*, in shape of a painter's pencil.
- Penicilliforme.** Pencil-shaped.
- PENNATUM.** Feathered.
- PENTACocca capsula.** A pentacoccus or five-grained capsule. Swelling out in five protuberances, or having five united cells, with one seed in each.
- PENTAGONUS.** Pentagonal or five-cornered.
- PENTAGYNIA.** The name of one of the orders in the fifth, tenth, eleventh, twelfth, and thirteenth classes in the Linnean System; containing those plants which have five pistils in a hermaphrodite flower.
- PENTANDRIA.** The name of the fifth class in Linneus's System. Comprehending those

- those plants which have hermaphrodite flowers with five stamens.
- PENTAPETALA.** Five-petaled.
- PENTAPHYLLUS.** Five-leaved.
- PERFOLIATUM** *folium*. A perfoliate or perforated leaf. Having the base of the leaf entirely surrounding the stem.
- PERFORATE.** The name of the sixtieth order in Linneus's Fragments of a Natural Method. So called because the plants contained in it have the leaves perforated with small holes.
- PERFORATUM.** Perforated. Full of small holes, very apparent when held up to the light.
- PERIANTHIUM.** The perianth, or calyx of a flower when contiguous to the other parts of fructification.
- PERICARPIUM.** A pericarp, seed-vessel, or seed-case.
- PERICHÆTIUM.** A bristly involucre, surrounding the base, among the leaflets; in mosses.
- PERMANENT.** Applied to leaves that remain on the plant till the fruit is ripe, or after the summer is over—To stipules continuing after the leaves drop off.
- PERSONATA.** A species of labiate corolla which has the lips closed.
- PERTUSUM.** Punched. Applied to a leaf which has hollow dots all over the surface.
- PETALUM.** A petal. The corollaceous integument of the flower.
- PETIOLUS.** A petiole, leaf-stalk or foot-stalk.
- Petiolulus.** A partial petiole. Connecting a leaflet with the main petiole, in compound leaves.
- Petiolaris cirrus.** A petiolar tendril. Proceeding from the petiole of a leaf.
- PILEUS.** The cap of a fungus, expanding horizontally, and covering the fructifications.
- PILOSUM.** Hairy. Having the surface covered with long distinct hairs.
- PILUS.** A hair. An excretory duct of a plant, in shape of a bristle.
- PINNA.** The large feather of a bird's wing, or a fin in fish. Applied in botany to the leaflet of some compound leaves.
- PINNATIFIDUM.** A species of simple leaf, divided transversely by oblong horizontal segments or jags—not extending to the midrib.
- PINNATUM.** Pinnate. A species of compound leaf, wherein a simple petiole has several leaflets fastened to each side of it.
- PIPERITÆ** (*Piper*, Pepper). The name of the first order in Linneus's Fragments; and of the second in his Natural Orders.
- PISTILLUM.** Pistil or pointal. A viscus or organ adhering to the fruit, for the reception of the pollen. It is the fourth part of the fructification; and is supposed by Linneus to be a continuation of the *medulla* or pith.—Its appearance is that of a column or set of columns in the centre of the flower; and, when perfect, it consists of three parts—1. *Germen*, the Germ or Ovary—2. *Stylus*, the Style. 3. *Stigma*.
- PITCHER-SHAPED.** Swelling or bellying out like a pitcher.
- PLACENTATIO.** Placentation. The disposition of the cotyledons or lobes in the vegetation or germinating of the seed.—Hence vegetables are distributed into—1. *Acotyledones*.—2. *Monocotyledones*. 3. *Dicotyledones*.—4. *Polycotyledones*.
- Plaited.** *Plicatus*. Folded like a fan.
- PLICATUS.** Plaited.
- PLUMOSA.** Plumose or feathered.
- PLUMOSUS** *Pappus*. Plumose, feathered or compound down.
- PLUMULA.** The plume, or ascending scaly part of the *Corculum* or heart of the seed.
- POLLEN.** Farina, or prolific powder, like fine meal or flower, contained in the anther of flowers, and which, according to Linneus, being moistened with a liquor peculiar to it, and lodged upon the stigma, bursts like a bladder, and explodes elastically a substance imperceptible to the naked eye.
- POLYADELPHIA.** The name of the eighteenth class in the Linnean System.—Comprehending those plants which bear hermaphrodite

hermaphrodite flowers, with three or more sets of united stamens.

POLYANDRIA. The name of the thirteenth class in the Linnean System. Comprehending those plants which bear hermaphrodite flowers with many stamens (from twenty to a thousand) growing single on the receptacle. The number of the stamens distinguishes this from the first eleven classes; their situation (on the receptacle) separates it from the twelfth class, *Icosandria*; and their simplicity avoids all confusion with the sixteenth and eighteenth classes—*Monadelphia* and *Polyadelphia*.

POLYGAMA. A polygamous plant is that which has hermaphrodite, and either male or female flowers, or both.

POLYGAMIA. The name of the twenty-third class in the Linnean System. Comprehending those plants which bear hermaphrodite flowers, accompanied with male or female flowers, or both; not inclosed within the same common calyx, but scattered either on the same plant, or on two, or on three distinct individuals.—Whence the three orders of this class—1. *Monœcia*—2. *Diœcia*.—3. *Triœcia*.

POLYGONUS caulis. A many-angled stem.

POLYGYNIA. The name of one of the orders in the fifth, sixth, twelfth, and thirteenth classes in the Linnean System. Comprehending those plants which have flowers with many pistils.

POLYPETALA corolla. A polypetalous corolla; or, a corolla of many petals.

POLYPHYLLUS. Many-leaved.

POLYSPERMA. Many-seeded.

POLYSTACHYUS culmus. A culm bearing several spikes.

POMACEÆ. The name of the thirty-seventh order in Linneus's Fragments; and of the thirty-sixth in his Natural Orders.—Comprehending such plants as bear a pome, or fruit resembling the apple.

POMUM. A pome. A pulpy pericarp without valves, containing a capsule.—It includes all the moist fruits which have the seeds lodged in a core; as *Apple*, *Pear*, *Quince*, &c.

PRÆMORSUS. Bitten off.

PRÆCIÆ. Early ripe.

PROCUMBENS caulis. A procumbent stem. Unable to support itself, and therefore lying upon the ground, but without putting forth roots.

PROLIFER caulis. A proliferous stem. Putting forth branches only from the centre of the top.

PRONUS discus. The lower side, or surface, or back of a leaf.

PUBES. Pubescence. All hairiness or shaginess in a plant; or whatever clothes it with any hairy or villous substance.

PUTAMEN. The shell of a nut and other fruits allied to it.

PUTAMINEÆ. The name of the thirty-first order in Linneus's Fragments, and of the twenty-fifth in his Natural Orders.

QUADRANGULARIS. Having four prominent angles.

QUADRICAPSULARE. Having four capsules.

QUADRIDENTATUS. Four-toothed.

QUADRIFIDUS. Four-cleft.

QUADRJUGUM. Pinnate, with four pairs of leaflets.

QUADRILOBUM. Four-lobed.

QUADRILOCULARE. Four-celled.

QUADRIPARTITUM. Four-parted.

QUADRIVALVE. Four-valved.

QUATERNA. Four-fold. Growing by fours.

QUINA. Five-fold.

QUINATUM folium. A sort of digitate leaf, which has five leaflets on a petiole.

QUINQUANGULARE. Five-cornered.

QUINQUECAPSULARE. Five capsules.

QUINQUEFIDUM. Five-cleft.

QUINQUEJUGUM folium. A pinnate leaf, with five pairs of leaflets.

QUINQUELOBUM. Five-lobed.

QUINQUELOCULARE. Five-celled.

QUINQUEPARTITUM. Five-parted.

QUINQUEVALVE. Five valves.

RACEMUS. A raceme. Anciently signifying a bunch of grapes, (raisins is supposed to be a corruption of the term)—In the Linnean language it is a species of inflorescence, consisting of a peduncle with short lateral branches.

RACHIS.

- RACHIS.** The spine. This term is also sometimes used for the principal rib of a leaf.
- RADIATA.** Radiate or rayed. A kind of compound flower, consisting of a disk, in which the corollets or florets are tubular and regular; and of a ray, in which the florets are irregular.
- RADICALIS pedunculus.** A root-peduncle.
- Radiale folium.** A root-leaf. Proceeding immediately from the root.
- RADICANS.** Rooting.
- RADIUS.** A ray.
- RAMENTUM.** A small particle of any thing; as gold dust, saw dust, or little chips, &c. Applied by Linneus to the small loose scales that are frequently found on the stems of vegetables.
- RAMEUM.** Growing on, or proceeding from a branch.
- RAMOSUS.** Branched. *Ramosissimus.* Very much branched.
- RAMUS.** A branch.
- Ramulus.* A branchlet, little branch, or twig.
- RECEPTACULUM.** A receptacle. The base by which the other parts of the fructification are connected.
- RECLINATUM.** Reclined. Bent downwards, so that the point of the leaf is lower than the base.
- RECTUS.** Straight.
- RECURVATUM.** Recurved. Bent, or rather bowed or curved downwards, so that the bow or convexity is upwards.
- REFLEXUS.** Reflex. Bent back.
- REFRACTUS.** Refracted. As it were broken.
- REMOTUS.** Remote. Distant.
- RENIFORME.** Reniform or kidney-shaped.
- REPANDUM.** Repand. The rim of which is terminated by angles, having sinuses between them inscribed in the segment of a circle.
- REPENS.** Creeping.
- RESUPINATA corolla.** When the upper lip faces the ground, and the lower lip the sky. Or, when that which is usually the upper lip becomes the lower; and the contrary; so that the flower is, as it were, turned upside down; or, in vulgar language, topsy turvy.
- RETICULATA.** Netted. Having distinct veins crossing like net-work.
- RETROFLEXUS.** Retroflex. Bending this way and that, in different directions, usually in a distorted manner.
- RETROFRACTUS.** Retrofracted. Reduced to hang down as it were by force. So that it appears as if it had been broken.
- RETUSUM.** Retuse. Ending in a blunt sinus.
- REVOLUTUS.** Rolled back or downwards.
- RHŒADES.** **RHŒADEÆ.** The name of the thirteenth order in Linneus's Fragments, and of the twenty-seventh in his Natural Orders; containing vegetables allied to the poppy.
- RHOMBEUM.** Rhombed. Having four equal sides, but the angles not right angles.
- RIB.** The continuation of the petiole along the middle of the leaf, and from which the veins take their rise.
- RICTUS.** The gape. The opening between the two lips in a labiate flower.
- RIGIDUS.** Rigid, stiff, inflexible, impatient of bending.
- RIMOSUS.** Rimose or chinked. Abounding in cracks, clefts, or chinks; as the outer bark of some trees.
- RINGENS.** An irregular one-petaled corolla, the border of which is usually divided into two parts, called the *upper* and *lower lip*.
- ROOT.** *Radix.* That organ of a vegetable which draws in the nourishment, and produces the herb with the fructification.
- ROOTING stem.** Bending to the earth and striking root, but not creeping along.— A rooting leaf. Shooting forth roots.
- ROOT-LEAF.** Proceeding immediately from the root, or growing next the ground.
- ROSACEA.** Rose-like.
- ROSTELLUM.** The rostel, or descending plane part of the corcle or heart, in the first vegetation of the seed.
- ROSTRATUS fructus.** A beaked fruit.
- ROTACEÆ** (*Rota*, a wheel) The name of the fifty-second order in Linneus's Fragments;

Fragments; and of the twentieth in his Natural Orders.

ROTATA. Wheel-shaped.

ROTUNDUM. Round.

Rotundo-trigonum. Obtusely three-cornered.

RUGGED or Scabrous. Rough with tubercles, or prominent stiffish points.

RUGOSUM. Wrinkled. When the veins are more contracted than the disk, so that the intermediate substance rises above them.

RUNCINATUM. Runcinate. A sort of pinatifid leaf, with the lobes convex before and straight behind, like the teeth of the large double saw used in sawing timber.

RUNNER. A shoot producing roots and leaves at the end only, and thus propagating the plant.

SAGITTATUM. A sagittate leaf. Shaped like the head of an arrow.

SALVER-SHAPED. Monopetalous, rising from a tube, with a flat border.

SARMENTACEÆ (*Sarmentum*, the twig or spray of a vine; from *sarpo* to prune. The name of the forty-ninth order in Linneus's Fragments; and of the eleventh in his Natural Orders.

SARMENTOSUS. Sarmentose. Filiform, almost naked; or having only leaves in bunches at the joints or knots, where it strikes root.

SCABER. Scabrous or rugged; something like shagreen.

SCABRIDÆ. The name of the twentieth order in Linneus's Fragments; and of the fifty-third in his Natural Orders.

SCABRITIES. *Ruggedness*. A sort of pubescence, composed of particles scarcely visible to the naked eye, scattered over the surface of vegetables.

SCALY. A scaly root or bulb; composed of scales lying over each other; as in the *Lily*—A scaly stem or peduncle; having scales scattered over it.

SCANDENS. A scandent or climbing stem.

SCAPUS. A scape or shaft. A stem bearing the fructification, without leaves.

SCARIOSUM *folium*. A scariose leaf. Of a

dry substance, sonorous to the touch.—

Applied to a perianth, which is membranous, tough, thin, and semi-transparent.

SCATTERED. *Sparsus*. Applied to branches, leaves, &c. which come out without any apparent regular order.

SCITAMINEÆ *Scitamina*. (*Scitamentum*.—

Scitum edulum. An eatable of a racy flavour, pleasant spicy plants.) The name of the third order in Linneus's Fragments; and of the eighth in his Natural Orders.—In the Artificial System these are in the first class.

SCORED stem. Marked deeply with parallel lines, or rather grooves.

SCUTELLUM. An orbicular concave fructification (in some lichens), with the edge raised all round.

SCYPHIFER. Cup-bearing.

SECUNDUS. All turned towards one side.

SEED-LEAVES. The primary leaves; being the cotyledons or lobes of a seed expanded, and in a state of vegetation.

SEED-VESSEL. See *Pericarpium*

SEGMENTA. Segments. The parts into which a calyx is cut.

SEGREGATA *Polygamia*. Segregate polygamy. When several florets comprehended within a common calyx are furnished also with their proper perianths. These constitute the fifth order of the class *Syngenesia*.

SEJUGUM *folium*. A sejugous leaf; or a pinnate leaf having six pairs of leaflets.

SEMIAMPLEXICAULE *folium*. A half-stem-clasping leaf. Embracing the stalk half way.

SEMISAGITTATA. Shaped like half the head of an arrow.

SEMITERES. Semicolumnar. Flat on one side, and rounded on the other.

SENTICOSÆ (*Sentis*, a briar or bramble). The name of the thirty-fifth order in Linneus's Fragments, and Natural Orders.

SEPIARIÆ (*Sepes*, a hedge). The name of the twenty-fifth order in Linneus's Fragments; and of the forty-fourth in his Natural orders, containing the hedge plants.

C c c

SERICEUM

SERICEUM. Silky. Covered with very soft hairs pressed close to the surface.

SERRATUS. Serrate, toothed like a saw.— Having sharp imbricated notches about the edge, pointing towards the extremity. The direction of the notches is the essential character of the Serrate leaf.

Serrato-ciliatum. Serrate-ciliate. Having fine hairs like the eye-lashes, on the serratures.

Serrato-dentatum. A serrate-toothed leaf. Having the serratures toothed.

Serrulatum. A serrulate leaf. Finely serrate, with very small notches, or teeth.

SESQUIALTER. When a large fertile floret is accompanied by a small abortive one.

SESSILE. Connected immediately with the stem or branch, without the intervention of a petiole; opposed to the petioled leaf.

SETA. A bristle. A strong, stiff, roundish hair.

Setaceous. Bristle-shaped.

Setosus. Bristly.

SHEATH. A membrane investing a stem or branch.

SICKLE-SHAPED. Applied to the keel of a papilionaceous flower.

SILICULA (dimin. from *Siliqua*). A silicule, silice, little pod or pouch. A two-valved pericarp, having the seeds fixed along both sutures, and the transverse diameter equal, or nearly so, to the longitudinal. This pericarp varies in shape; being orbiculate, ovate, or flattened; entire at the end, or emarginate. Hence

SILICULOSA. The name of the first order in the class *Tetradynamia*.

SILIQVA. A silique or pod. An oblong, membranaceous, two-valved pericarp, having the seeds fixed along both sutures.

SILIUOSA. The name of the second order in the class *Tetradynamia*; containing those plants which have a proper *Siliqua* for a pericarp.

SILIUOSÆ. The name of the fifty-seventh order in Linneus's Fragments; of the thirty-ninth in his Natural Orders; and of the twentieth class in Ray's method.

They are the same with the *Cruciformes* of Tournefort.

SINUATUM. Sinuate. Having large curved breaks in the margin, resembling bays.

SPADIX. The receptacle in palms, and some other plants, proceeding from a spathe.—It is either branched as in *Palms*, or simple, as in *Dracontium*, &c. In some it is one-flowered; in others many-flowered.—Hence

SPARSUS. Scattered. Neither opposite nor alternate, nor in any apparent regular order.

SPATHE. A spathe. The calyx of a spadix, opening or bursting longitudinally, in form of a sheath.

Spathaceæ. The name of the eighth order in Linneus's Fragments, and of the ninth in his Natural Orders.

SPATULATUM folium. A spatulate, or spatula-shaped leaf. Roundish, with a long, narrow, linear base; like a spatula or a battledore.

SPICA. A spike. A species of inflorescence, in which sessile flowers are (scatteredly) alternate on a common simple peduncle.

SPICULA. A spicule or spikelet. A partial spike, or a subdivision of it.

SPINA. A spine or thorn.

SPIRALIS. Spiral. Twisted like a screw.

SQUARROSUS. Ragged. Consisting of scales very widely divaricating, or spreading every way.

STAMEN. An organ or viscus for the preparation of the pollen; and formed, according to Linneus, from the wood. It is the third part in the fructification; and consists of the *filament* and *anther*.

STANDARD or Banner. The upper petal of a papilionaceous corolla; as in the *Pea*.

STATUMINATÆ. The name of the sixty-first order in Linneus's Fragments of a Natural Method, in *Philos. Botanica*; containing only *Ulmus*, *Celtis*, *Bosca*.

STELLATA. When more leaves than two surround the stem in a whorl; or radiate from the stem like the spokes of a wheel, or like a star, as it is vulgarly represented.

- ed. They are otherwise called *Verticillata*; and come out regularly in sets one above another. A stellate bristle. When a little star of smaller hairs is affixed to the end.
- Stellatae*. The name of the forty-fourth order in Linneus's Fragments, in *Philos. Bot.*—and the forty-seventh in his Natural Orders, at the end of *Gen. Pl.*—The name of a class also in Ray's and Herman's Methods.
- Stem-clasping*. Applied to a leaf, when the base surrounds the stem.
- STIGMA*. The top of the pistil, pubescent and moist, in order to detain and burst the pollen or prolific powder.
- STIPES*. The base of a frond; or, a species of stem passing into leaves, or, not distinct from the leaf.
- STIPULA*. A stipula or stipule.—A scale at the base of the nascent petioles, or peduncles.
- STRIATUS*. Striated or streaked.
- STRICTUS*. Stiff and straight.
- Strictissimus*. Very stiff and straight.
- STRIGA*. Stiffish, flattish bristles.
- STRIGOSUS*. Set with stiff lanceolate bristles.
- STROBILUS*. A strobile. A pericarp formed from an ament—by the hardening of the scales.
- STYLUS*. The style. The middle portion of the pistil, connecting the stigma with the germ.
- Subacautis*. Almost without stem.
- Subaequalis*. Nearly equal.
- Subamplexicaulis*. Slightly embracing the stem.
- Subcordatus*. Subcordate. Somewhat heart-shaped.
- Suberosus*. As if a little eaten or gnawn.
- Subexcedens*. A very little longer.
- Sublanatus*. Somewhat woolly.
- Subnudus*. Almost naked.
- Suborbiculatus*. Almost orbiculate.
- Subovatus*. Subovate. Almost or nearly ovate.
- Subpetiolatus*. Scarcely petioled, or with a very short petiole.
- Subramosus*. Having only a chance branch or two.
- Subrepandus*. Somewhat repand.
- Subsessilis*. Subsessile, or almost sessile.
- Subtrifidus*. Slightly trifid.
- Subuniflorus*. Having one or two flowers only, or most commonly one—one or thereabouts.
- SUBEROSUS*. Corky, like cork.
- SUBULATUS*. Subulate, or awl-shaped.
- SUCCULENTÆ* (*succus*, juice). The name of the forty-sixth order in Linneus's Fragments, and of the thirteenth in his Natural Orders.
- SUCCULENTUM*. Succulent.
- SUFFRUTEX*. An undershrub.
- SUFFRUTICOSUS*. Suffruticose. Undershrubby.
- SULCATUS*. Furrowed, grooved, or fluted. Scored with deep broad channels longitudinally.
- SUPERFLUA Polygamia*. Superfluous polygamy. The name of the second order in the class *Syngenesia*, wherein the florets of the disk are hermaphrodite and fertile; and the florets of the ray, though female only, are also fertile.
- SUPRA-DECOMPOSITUM*. A superdecompound leaf.
- SUPRA-FOLIACEOUS*. A peduncle or flower inserted into the stem above the leaf, or petiole, or axil.
- SURCULUS*. A little branch or twig.
- SYNGENESIA*. The name of the nineteenth class in Linneus's Artificial System:—Comprehending those plants which have the anthers united into a cylinder.
- TAIL*. A process or thread, terminating a seed, and facilitating its propagation.
- TENDRIL* or *Clasper*. One of the fulcres. A filiform spiral band, by which a plant is fastened to another body—or by which a weak plant supports itself on others.
- TENUIS* is put both for *Slender* and *Thin*.
- TERES*. Without angles. It may often be safely expressed in English by *Round*.
- Teretiusculus*. Almost or inclining to columnar.

- TERGEMINUM folium.** A tergeminate or thrice-double leaf.
- TERMINALIS.** Terminating, or coming out at the end of a branch or stem.
- TERNA folia.** Three-fold leaves, in threes, or three and three; expressing the number of leaves on each whorl or set.
- TERNATUM folium.** A ternate leaf. Having three leaflets on one petiole.
- TESSELATUM.** Tessellate or chequered.—Painted or spotted like a chess-board.
- TETRADYNAMIA.** The name of the fifteenth class in the Linnean System.—Comprehending those plants which bear hermaphrodite flowers with six stamens, four of them (more powerful) longer than the other two. This is a truly natural class, and the same with the *Cruciformes* of Tournefort—the *Siliculosæ* and *Siliquosæ* of Ray; which last are the names of the orders into which the class is divided by Linneus.
- TETRAEDRA.** Four-sided.
- TETRAGONOUS.** Four-cornered.
- TETRAGYNIA.** One of the orders in several classes of Linneus's System. Comprehending those plants which have four pistils.
- TETRANDRIA.** The fourth class in the Linnean System. Comprehending those plants which have hermaphrodite flowers with four stamens of equal lengths.
- TETRAPETALA.** Four-petaled.
- TETRAPHYLLUS.** Four-leaved.
- TETRASPERMA.** Four-seeded.
- THYRSUS.** A panicle contracted into an ovate form.
- TOMENTOSUS.** Downy, nappy, cottony, or flocky.
- TONGUE-SHAPED.** Linear and fleshy, blunt at the end, convex underneath, and having usually a cartilaginous border.
- TOROSUS.** Torose, protuberant, swelling out in knobs; like the veins and muscles.
- Torulosis.** Swelling a little.
- TORTILIS.** Twisted, or twisting.
- TRACHEÆ.** Air-vessels.
- TRIANDRIA.** The name of the third class in the Linnean System. Comprehending those plants which bear hermaphrodite flowers with three stamens.—The second order *Digynia* contains most of the grasses.
- TRICHOTOMUS.** Dividing by threes.
- TRICocca.** Swelling out in three protuberancies, internally divided into three cells, with one seed in each.
- TRICOCCE.** The name of the forty-seventh order in Linneus's Fragments, and of the thirty-eighth in his Natural Orders.
- TRICUSPIDATUM.** Three-cusped or three-pointed.
- TRIGYNIA.** The name of the third order in the first thirteen classes of the Linnean System, except the first, fourth, and seventh; including those plants which have three pistils to each flower.
- TRIHLATÆ** (three-scarred, see *Hilum*). The name of the fiftieth order in Linneus's Fragments, and of the twenty-third in his Natural Orders.
- TRIUGUM folium.** A trijugous leaf. A pinnate leaf with three pairs of leaflets.
- TRICECIA.** The name of the third order in the class *Polygamia*; and signifying that there are hermaphrodite male and female flowers of the same species on three distinct individuals.
- Tripetalodeæ.** The name of the sixth order in Linneus's Fragments; and of the fifth in his Natural Orders.
- TRIQUETER.** Three-sided.
- TRUNCATUM.** Truncate. Ending in a transverse line—so that it seems as if the tip of the leaf had been cut off.
- Tuber.** A knob, in roots.
- TUBERCULUM.** A little knob, like a pimple.
- TUBEROSA.** Tuberous or knobbed.
- TUBUS.** A tube or hollow pipe. Put for the lower, narrow, hollow part of a monopetalous corolla, by which it is fixed into the receptacle.
- TUNICATUS.** Tunicated or coated.
- TURBINATUM.** Turbinate, or top-shaped.
- TURGIDUM.** Turgid or swollen.
- TWINING stem.** Ascending spirally round a branch, stem, or prop. This is done either from the right to left, contrary to the

- the sun's apparent motion, as in *Hops*, *Honeysuckle*, *Black Bryony*, &c.—Or from left to right with the sun, as in *Convolvulus*, *Basella*, *Phaseolus*, *Cynanche*, *Euphorbia*, *Eupatorium*.
- VAGINA. A sheath, or membrane investing a stem.
- VAGINALES. The name of the twenty-seventh order in Linneus's Fragments of a Natural Method in his *Philos. Bot.*
- VALVA. A valve, valvelet, or valvule.
- VAULTED. Arched like the roof of the mouth.
- VENOSUM. Veined.
- VENTRICOSUS. Bellied. Distended. Swelling out in the middle.
- VEPRECULÆ (from *Vepres*, a brier.) The name of the fifty-fourth order in Linneus's Fragments, and of the thirty-first in his Natural Orders.
- VERRUCOSA. Warted. Having little knobs or warts on the surface.
- VERTICILLUS. A sort of inflorescence made up of many subsessile flowers surrounding the stem in a ring.
- Verticillatæ*. Verticillate plants. These are included in the fifty-eighth order of Linneus's Fragments, and the forty-second of his Natural Orders. In the Artificial System, they form the order *Gymnospermia* of the class *Didynamia*.
- VESICULARIS. Vesicular or bladdery ruggedness. Having little glands like bladders on the surface.
- VEXILLUM. Standard or banner.
- VILLOSUS. Villose. Pubescent or covered with soft hairs.
- VIMEN. A bending twig or wythe; slender and flexible, fit for binding.
- VIRGATUS. A rod-like or wand-like stem or branch.
- VIRGULTUM. Small twigs or brushwood.
- VISCIDUM. A viscid or clammy leaf.
- VISCOSITAS. Viscidity or clamminess.
- VIVIPARA. A viviparous plant or stem.—Producing its offspring alive; either by bulbs instead of seeds; or by the seeds themselves germinating on the plant, instead of falling as they usually do.
- UMBELLA. An umbel. Withering translates it the rundle. A receptacle stretching out into filiform proportioned peduncles from the same centre.
- UMBELLATÆ. The name of the twenty-second order in Linneus's Fragments; and of the forty-fifth in his Natural Orders. Included in the second order of the fifth class, in the Artificial System. This order is called by Ray and others *Umbelliferæ*; by Cæsalpinus *Ferulaceæ*.
- UMBELLULA. An umbellule or umbellet. The same with the partial umbel.
- UMBILICUS. The navel. Used for the cavity at the end of some fruits opposite to the foot-stalk.
- UNARMED. Without thorns or prickles.
- UNCINATUS. Uncinate. Hooked at the end.
- UNDATUS, *Undulatus*. Waved. The surface rising and falling in waves, or obtusely; not in angles.
- UNGUICULATUM *petalum*. A petal with a claw.
- UNGUIS. A claw. The base of the petal in a polypetalous corolla.
- UNGULATA. Hoof-shaped.
- UNIFLORUS. A one-flowered peduncle.
- UNILABIATA. One-lipped.
- VOLVA. The membranaceous calyx of a fungus.
- VOLUBILIS. Twining.
- URCEOLATUS. Pitcher-shaped.
- URENS. Stinging, or armed with stings.
- WEDGE-SHAPED leaf. Having the longitudinal diameter exceeding the transverse one, and narrowing gradually downwards.
- WHEEL-SHAPED corolla. *Rotata*. Monopetalous, and expanded flat without any tube.
- WINGS. *Alæ*. The two side petals in a papilionaceous corolla. Also, membranes affixed to the seed.
- Winged* petiole. Having a thin membrane or border on each side; or, dilated on the sides; as in *Orange*.
- Woolly. *Lanatus*. Clothed with a pubescence resembling wool.
- WRITHED. Twisted very much.

N. B. The foregoing explanations have been extracted from Dr. Martyn's Language of Botany.

GENERAL

CENTRAL

M. D. The foregoing explanations have been

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F I N I S.

ERRATA.

VOLUME I.

PREFACE page iv. line 9, for "surgeon-general," read "physician-general," which office was held by Doctor Writ, from 1785 to 1792.

- Page line 3, after "blackish," add "Browne calls this plant Mountain Mahoe."
 — 17, for "perianthium," read "pericarpium."
 — —, after the general character of Acideton, insert the specific name, "URENS. STINGING."
 — 21, dele "ACISANTHERA."
 — after line 13, insert "ACOM, see YAMS."
 — after line 14, insert "ADDER'S TONGUE, see SERPENT'S TONGUE."
 — after line 5, insert "AFRICAN MARYGOLD, see FRENCH MARYGOLD."
 — 8, for "SAMPHIRE," read "SEASIDE PURSLANE"
 — 9, for "Genus Doubtful," read "BLIGHIA SAPIDA."
 — 11, 8, after "SELF-HEAL," add "and SAVORY."
 — 12, 6, add "and NUTMEG AMERICAN."
 — after line 8, insert "ALLOPHYLLUS, see COMINIA."
 — 16, 5, from bottom, for "aquatic," read "aqueous;" line 3 from bottom, for "extract," read "tincture."
 — 19, 30, dele "see HEDYOTIS."
 — 21, after line 11, insert "ANGELYN-TREE, see CABBAGE-BARK TREE."
 — 24, 18 dele "see QUINCE."
 — 36, 21, for "Monogynia," read "Polygynia."
 — 38, the reference at the foot of the species of Laurus, should read, "see BENJAMIN, BAY TREES, CAMPHIRE, CINNAMON, COGWOOD, and SWEETWOOD."
 — 43, 10, for "very deservedly and very generally," read "very generally and very deservedly."
 — 50, 24, add "The bark of the small branches may be used for Peruvian bark."—(Dancer's M. A. page 387.) Same page, last line, for "PRICKLY PEAR," read "INDIAN FIG."
 — 57, 11, for "subdentalis," read "subdentatis"
 — —, 15, after "climbing," insert, "to the tops of the tallest trees, and common in Jamaica woods."
 — —, 26, after "berry roundish," read, "smooth, reddish on one side; one seeded; seed rugged, of a biting taste, like arum."
 — 59, 22, after "rays," insert, "in five parcels of two each, so that there are thirty anthers."
 — —, 23, after "three," read, "adhering."
 — 61, 20, for "see GERMANDER," read, "see SEASIDE GERMANDER."
 — 62, at foot of the page insert, "BASTARD JASMINE, see POISON BERRIES."
 — 65, after second paragraph, insert, "see CYNANCHIUM." Same page, before "BASTARD LOCUS TREE," insert "BASTARD LIGNUM VITÆ, see BUCKTHORN, and LIGNUM VITÆ BASTARD."
 — 66, 61, add, "This plant is called *Wild Pear* in some places."
 — 70, 23, after "plantain," insert, "which are hard, rough, and stone-like."
 — 71, 20, add "it flowers in July and August."
 — 79, after line 29, insert, "BEAD BUSH, see TRICHILIA."
 — 82, after the article "BENJAMIN TREE," insert, "see AVOCADO, BAY, CAMPHIRE, CINNAMON, COGWOOD, and SWEETWOOD, Trees."
 — 84, after the account of "Bermudas Cedar," insert, "In Liguanea Mountains, Juniper Cedars have been cut down, three feet in diameter, and 70 in length."
 — 90, last two lines, dele "JALAP and SCAMMONY."
 — 94, after line 22, insert, "BITCHWOOD, see DOGWOOD."
 — 99, after the article "BLACK CHERRY," insert, "see BAY BERRY, BASTARD GREENHEART, MYRTLE, and PIMENTA."
 — 100, after line 19, insert "BLADDERWORT, see UTRICULARIA."
 — 110, 20, for "t. 182" read "231."
 — 111, 4, from bottom, add "Browne calls this tree Bastard Nicaragua."
 — 116, after line 3, from bottom, insert, "BROAD-LEAVED CHERRY, see CLAMMY CHERRY."
 — 123, last line, dele "HONEYSUCKLE," and insert, "LOVE IN A MIST."
 — 129, at foot of page add, "BYSSUS, see SEA WEEDS."
 — 139, in the reference, end of first paragraph, dele "EAST INDIA EBONY and POPONAX."
 — 146, 17, dele "SASSAFRAS," and insert "SWEETWOOD."
 — 151, dele line 4.
 — 152, 7, dele WILD INDIGO.
 — 154, after line 26, insert "CAPE JASMINE, see INDIGO BERRY."
 — 165, last line, dele "WILD INDIGO."
 — 172, dele the article "CELOSIA, the same having been re-inserted under the name Cockscorn."
 — 183, 30, add, "hogs eat the leaves as well as fruit of this vine heartily."

- Page 189, line 25, dele "JALAP and SCAMMONY."
- 190, — 20, the paragraph beginning, "This is the Self-Heal," &c. and the following quotation from Barham, should be placed after the 13th line of the following page, as the Self-Heal is the species *blechum* of Ruellia, and not the *paniculata*."
- 194, — 34, for "Sassafras" read "Sweetwood."
- 198, — 27, after "stamens" insert, "the flowers have sometimes 7 stamens and 7 segments in the corolla."
- 212, — 16, for "root" read "roots."
- 228, after the article "Cogwood," insert, see "AVOCADO, BAY, CAMPHIRE, CINNAMON, and SWEETWOOD TREES."
- 242, — 5, from bottom, read "irregularly three or five cleft."
- — 4, from ditto, after "incumbent" read, "with a yellow winding border."
- — 3, from ditto, after "germ" read, "flat at bottom."—After "stamens" read, "There is a roundish knob at foot, where the stamens are united, with five indentures, between which and the germ it is thread-like."
- 256, after article "CUSTARD APPLE," insert, "see ALLIGATOR APPLE, CHERIMOLA, SOUR and SWEET SOPS."
- 275, after the article "DUMB CANE," add, "see COCOES, FIVE-FINGER, INDIAN KALE, WAKE ROBINS."
- 280, — 7, from bottom, for "prickly" read "branched."
- 281, — 16, read "white flowers."
- 298, after line 8, insert, "see SENSITIVE PLANTS."
- —, after the article "FIVE-FINGER," insert "see COCOES, DUMB-CANE, INDIAN KALE WAKE ROBINS."
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- 312, — 13, from bottom, for "inconsiderably" read "inconsiderately."
- 317, — 22, after "oblong" add, "grooved."
- 318, — 15, instead of "the flowers are of a purple colour," read, "The stamens are very long, numerous, and purple, giving an appearance of purple to the whole flower, though the petals are whitish. They grow in large clusters, and give the tree a very beautiful appearance."
- 324, — 14, for "once at a time" read, "one at a time."
- 327, — 3, add, "see RED BEAD TREE."
- —, — 30, add, "see WEST INDIA TEA."
- 325, At end of first paragraph, add, "In the year 1811, it bore 2750 bunches of fine fruit.—
Mon. Mag. Sept 1811."
- 336, — 9, from bottom, after "LEMON," insert "LOFTY;" and in the second line after, place UNIOLEA after TURTLE.
- 392, — 10, from bottom, read, "in pretty large doses."
- 398, — 11, for "Pentandria" read "Decandria."
- 458, — 13, from bottom, read, "OR. 4."
- 468, after line 16, read, "see COCO NUT and PRICKLY POLE."
- 481, after line 3, insert, see "BULLY TREE and NASEBERRY."
- 528, — 12, from bottom, for "SRRIATUS," read "STRIATUS."

VOLUME II.

- 9, at corner of running title, read "NIGHTSHADES."
- 13, — 2, for "OR. 8," read "OR. 9."
- 26, — 10, for "CL. 25," read "CL. 22."
- 52, — 15, from bottom, for "DICTACLYON," read "DISTACHYON."
- 91, — 2, for "CL. 25," read "CL. 21."
- 109, — 10, from bottom, for "CL. 5," read "CL. 15."
- 127, last line, for "CL. 3," read "CL. 23."
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- 152, — 16, for "OR. 5," read "OR. 7."
- 174, — 4, from bottom, for "OR. 9," read "OR. 10."
- 178 & 179, the article "SOLANDRA," should have been omitted, as it is again described under the English name TRUMPET FLOWER PEACH-COLOURED.
- 193, — 22, for "paarts" read "parts;" and line 37, for "ground" read "ground."
- 195, — 5, from bottom, for "moderately" read "moderately."
- 214, after Exports of Sugar, add, "1813, 97,548 hogsheads, 10,029 tierces, and 2304 barrels."
- 226, — 7, for "VOLIBILIS," read "VOLUBILIS."
- 263, — 23, for "Diandria," read "Triandria."
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Lunan, John

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